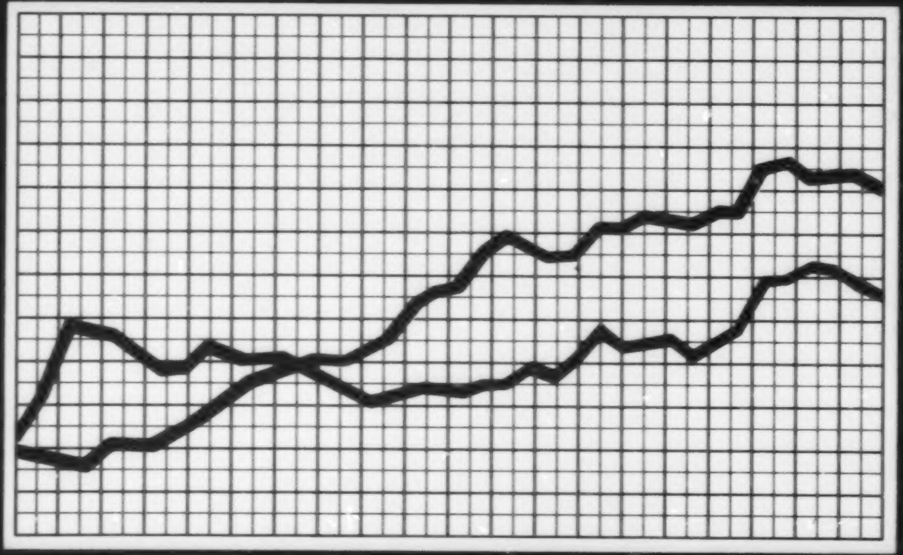
BIG SPENDERS

A Survey of Provincial Government Finances in Canada

Irene K. Ip



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by

Irene K. Ip

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Contents

Foreword vii

Acknowledgments ix

List of Abbreviations x

Big Spenders: An Overview 1
Fiscal Prudence 2
Accountability 8
Government Costs 9
Salient Points and Recommendations 11

1 *An Overview of PLH-Sector Balance Sheets* 17
  Of Deficits and Debt 20
  Accounting and Accountability 31

2 *An Anatomy of Expenditure* 40
  Some Notes on Economic Analysis 47
  Expenditure Developments 49
  The Growth of Government 71
  The Relative Price of Government Expenditure 89
  Conclusion 103

3 *Financing PLH-Sector Expenditure* 109
  Some History 111
  PLH-Sector Revenue Developments 112
  The Tax Burden 122
  The Effects of Rising Revenue-to-GDP Ratios 130
  Conclusion 132

4 *Profiles of the Provinces* 135
  Evaluating Provincial Economies 137
  PLH-Sector Expenditure by Province 160
  Variations in Revenue Developments 179
  Concluding Comments 191

5 *The Politics of Deficits* 197
Guidelines for Fiscal Prudence 202
Summary and Policy Recommendations 207
Concluding Comments 212

Appendix A: Data on Provincial, Local, and Hospital Finances, by Province 213

Appendix B: Federal-Provincial Constitutional and Economic Relations 285
Introduction 287
Historical Background 288
Interprovincial Issues 303
Federal Issues 304
The Political Economy of Tax Coordination 306
Summary 315

Bibliography 319

Members of the C.D. Howe Institute 323

Figures

1.1 Net Debt in the Federal and Provincial-Local Sectors, 1969–89 21
1.2 Revenue and Expenditure in the Provincial-Local Sector as Percentages of GDP, 1950–89 24
1.3 Debt-to-GDP Ratios in the Provincial-Local Sector, by Region 26
1.4 Debt-to-GDP Ratios in the Provincial-Local Sector, by Province 29
2.1 Government Expenditure-to-GDP Ratios, 1946–89, in Current Dollars 43
2.2 Government Expenditure-to-GDP Ratios, 1946–89, in Constant Dollars 44
2.3 Government Expenditure Per Capita, 1931–89, in Constant Dollars 45
2.4 Government Expenditure as a Percentage of GDP, 1950–89 47
2.5 Government Spending on Current Goods and Services, 1950–89 51
2.6 Government Transfers to Persons and Business, 1950–89 52
2.7 PLH-Sector Capital and Consumption Spending, 1950–89 57

2.8 Consumption Spending by the Provincial, Local, and Hospital Sectors, 1950–89 59
2.9 Fixed Capital Spending in the Provincial, Local, and Hospital Sectors, 1950–89 63
2.10 Current Public Expenditure on Goods and Services, 1950–89 90
3.1 Adjusted Government Revenues, 1950–89 113
3.2 Indirect Federal and Provincial Government Taxes, 1950–89 119
3.3 Personal Income Taxes and Other Direct Charges, 1950–89 120
3.4 Corporate Taxes, 1950–89 121
A.1 Employment and Real GDP Growth, 1967–89 (by province) 215–219
A.2 Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89 (by province) 220–224
A.3 Public Consumption as a Percentage of Private Consumption, 1961–89 (by province) 225–229

Tables

1.1 Provincial and Local Per Capita Net Debt and Debt-to-GDP Ratios, 1989 27
1.2 Changes in Real GDP Growth and Provincial-Local Debt Ratios, 1970–89 28
2.1 Changes in Government Expenditure, 1952–89 46
2.2 Government Expenditure: An Overall View, 1951–89 50
2.3 PLH-Sector Expenditure as a Proportion of GDP and Total Expenditure, 1962–89 53
2.4 Consolidated Provincial and Local Government Expenditure 54
2.5 Government Expenditure by Economic Category, 1952–89 55
2.6 Major Categories of Provincial and Local Government Transfers 67
2.7 Wages and Salaries as a Proportion of Government Spending, 1989 98
2.8 Effective Increases in Base Wage Rates, 1967–89 99
3.1 PLH-Sector Revenue-to-GDP Ratios, 1962–89 114
3.2 PLH-Sector Revenue, 1989 117
4.1 Indicators of Provincial Economic Performance, 1979–89 142
4.2 Selected Federal Expenditures Allocated to Regions, 1984–88 154
4.3 Provincial Indexes of Per Capita Income and GDP 158

4.4 Expenditure-to-GDP Ratios in the PLH Sector, 1961–89 161

4.5 PLH-Sector Expenditure Shares by Economic Category, 1987–89 Average 165

4.6 PLH-Sector Transfers to Persons, 1962–89 168

4.7 Provincial and Local Transfers to Business, 1962–89 171

4.8 Provincial and Local Expenditure by Function, 1989 178

4 9 Provincial and Local Taxes Per Capita, 1989 184

4.10 Federal Transfers to Provinces and Municipalities, 1961–89 190

A.1 PLH-Sector Revenue and Expenditure, 1980–89 (by province) 230–241

A.2 PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962–89 (by province) 242–252

A.3 PLH-Sector Revenue and Expenditure as Proportions of Totals, 1962–89 (by province) 253–263

A.4 PLH-Sector Revenue and Expenditure Per Capita, 1961–89 (by province) 264–274

A.5 Provincial and Local Debt-to-GDP Ratios, 1980–89 275

A.6 Provincial and Local Deficit (Surplus)-to-GDP Ratios, 1975–89 276

A.7 PLH-Sector Own-Source Revenue, 1979 and 1989 277

A.8 PLH-Sector Own-Source Revenue Per Capita, 1979 and 1989 278

A.9 PLH-Sector Own-Source Revenue as a Proportion of Total Revenue, 1979 and 1989 279

A.10 Shares of Gross Domestic Product by Sector, 1971 and 1985 280–282

B.1 Major Cash Transfers from the Federal Government to the Provinces, Territories, and Municipalities, fiscal year 1989/90 293

B.2 The Fiscal Capacity and Tax Effort of the Provinces, fiscal year 1989/90 295

B.3 Key Changes in Federal-Provincial Fiscal Arrangements, 1941–90 298–300

B.4 Provincial Unemployment Rates and Combined UI Balance and Canada Assistance Plan Transfers 312

Foreword

Contrary to popular impressions, the constitutional crisis in which Canada now finds itself was not precipitated solely by Quebec's demand for recognition of its cultural and linguistic distinctiveness or by that province's economic aspirations. The crisis has also been fueled by the demands imposed on this most-favored nation by the exigencies of global competition and capital flows, by inappropriate fiscal policies pursued by both the federal and provincial levels of government, and by the growing strains that are now evident in Canada's social security systems. Over the next 18 months, Canadians will have cause to consider and to reassess the roles of each level of government so that the country may be better positioned to meet the economic challenges and social requirements of the 1990s, and beyond.

Big Spenders: A Survey of Provincial Government Finances in Canada, by Irene Ip, a Senior Policy Analyst at the C.D. Howe Institute, appears then at a particularly opportune moment. Most Canadians — and indeed most observers in the rest of the world — tend to focus on the federal fiscal dimension and fail to appreciate the size and significance of the provincial, local, and hospital (PLH) sector. In aggregate, however, the PLH sector is larger than the federal sector, and its impact on monetary policy, exchange rates, trade balances, and Canada's competitiveness in the globalizing economy is considerable.

The light that Irene Ip sheds on the crucial PLH sector in this study should prove to be a valuable contribution to the discussion that is now under way on the role and structure of government in the Canadian federation.

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Thomas E. Kierans
President and
Chief Executive Officer

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I also benefited from extensive consultations with colleagues, past and present, at the Institute. Any errors, however, are entirely my responsibility.

Irene K. Ip
Toronto, May 1991

List of Abbreviations

AHSTF	Alberta Heritage Savings Trust Fund
CAP	Canada Assistance Plan
CCA	Capital consumption allowance
CICA	Canadian Institute of Chartered Accountants
CIT	Corporate income tax
CPP	Canada Pension Plan
EPF	Established Programs Financing
FMS	Financial Management System
GBE	Government business enterprise
GIS	Guaranteed income supplement
GST	Goods and services tax
GWA	General welfare assistance
NIEA	National Income and Expenditure Accounts
OECD	Organisation for Economic Co-operation and Development
PEA	Provincial Economic Accounts
PIP	Petroleum Incentive Program
PIT	Personal income tax
PLH	Provincial, local, hospital (sector)
PSSF	Public service superannuation fund
QPP	Quebec Pension Plan
RST	Retail sales tax
SNA	System of National Accounts
UI	Unemployment insurance
WCBs	Workers' compensation boards

The data used in this study, unless otherwise indicated, are from Statistics Canada's *National Income and Expenditure Accounts*, Annual Estimates (December 1990 release); *Provincial Economic Accounts* (February 1991 release); and *Financial Management System*, Provincial and Local Assets and Liabilities (January 1990 release) and Consolidated Provincial-Local Government Revenue and Expenditure (January 1991 release).

The Financial Management System does not include the hospital sector. For the sake of simplicity, however, the term "PLH" (for provincial, local, and hospital) has been used throughout the text when the data are drawn from that source.

Statistics Canada combines the provincial fiscal years, which end March 31, and local government fiscal years, which end December 31. For the sake of simplicity, this study refers to such combined fiscal years in calendar-year terms.

Big Spenders: An Overview

When it comes to looking at this country's public finances, most Canadians — and indeed most financial observers in the rest of the world — tend to focus on the federal government. Few recognize, let alone bother to analyze, the repercussions of provincial fiscal policy on Canada's overall financial health, implicitly dismissing the provincial governments as more or less irrelevant.[1] Such a conclusion could not be more erroneous, as recent provincial budgets and the constitutional re-examination of federal fiscal arrangements have highlighted.

By almost any measure, the collective power of the PLH sector — the provincial and local governments plus the hospital sector — outweighs that of the federal government. PLH financial assets are more than double those of the federal counterpart and PLH non-financial assets are seven times as large. In 1989, the PLH governments spent $1.36 for every dollar the federal government spent, and they raisd $1.05 in taxes and other charges for every dollar the federal government raised. Only in the size of its debt is the federal government larger, and even there the PLH sector briefly overtook the federal government in the second half of the 1970s.

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[1] For example, a 1989 economic survey of Canada by the Organisation for Economic Co-operation and Development (OECD) did not even mention the provinces in a table headed "Basic Statistics of Canada" and gave only passing mention to a few of them in the text. See Organisation for Economic Co-operation and Development, *1988/89 OECD Economic Surveys: Canada* (Paris: OECD, 1989).

Clearly, the financial situation of the PLH sector is important to the well-being of Canadians. Moreover, as the fabric of Canadian federation is partially rewoven over the next decade or so, the fiscal performances and structures of individual provinces are likely to come under closer scrutiny by voters. One of the things they will be looking for is improved fiscal clarity. At the very least, they will want to understand which level of government has been responsible for which tax and which program.

Voters will also be seeking a greater knowledge of the economic facts of Confederation. The disagreements, irritations, and fears that had lurked beneath the surface of Canada's federalism for decades began to be more openly aired in the 1980s. Some provinces charged that the federal government was walking away from previous commitments, and others criticized its growing unilateralism in areas of joint interest. More recently, many provinces have been aggravated by what they see as an increasing penetration of taxation fields that have been important to them and a shifting of the federal deficit onto them. Facing these issues squarely can either provide an opportunity for forging a healthier and more satisfying relationship among the provinces and between the provinces and Ottawa or- create an environment of bitterness and divisiveness. As Canadians set about debating new federal structures, they will need a lot more understanding about each province; one of the most important aspects will be the financial situation of each, which is the subject of this book.

Fiscal Prudence

Nowhere is ignorance about the PLH sector's role in Canada's finances more evident than in regard to the country's collective debt burden. International organizations publish figures on countries' general government debt but tend to focus their comments on the activities of central governments. Yet anyone who neglects the PLH sector's finances overlooks the influence of its fiscal policy on the federal government's financial situation in particular and the economic health of the country in general.

Recent Performance by Region and Province

The fact that the PLH sector collectively has a smaller debt than the federal government disguises a very troublesome picture when the provinces are taken separately. The net situation of Prince Edward Island, Ontario, and British Columbia improved in the late 1980s and their debts are relatively low, whether in dollars per capita or as a percentage of GDP. Saskatchewan's balance-sheet position deteriorated markedly during the 1980s, but it too has a relatively low debt per capita and as a percentage of GDP; Alberta's remains in a net financial-assets position, although it has been considerably reduced since the mid-1980s. The net debt ratios of the remaining five "have-not" provinces are estimated to have ranged between 25 percent and 42 percent at the end of the 1980s. Only Newfoundland and Manitoba had reduced their ratios before the 1990–91 recession. The debt burdens of these five provinces are high enough to be a serious constraint on their financial maneuverability.

In fact, provincial governments were generally too tolerant of chronic deficits during the expansion of the 1980s. Windfall revenues and fiscal dividends were too rarely used to reduce deficits. Even though most provinces resorted to broad-based tax increases to increase revenue for a number of reasons, including the need to mitigate the fiscal effects of the 1981–82 recession, progress toward balancing the budgets proceeded very slowly. By 1989, only the provincial-local sectors of Ontario, Manitoba, and British Columbia were in a surplus position — as measured according to Statistics Canada's Financial Management System — and these achievements were fragile. In most cases, improvement of balance sheets came from a combination of good economic growth and an increase in effective tax rates.[2]

Although foot-dragging on deficit reduction in the PLH sector appears to have been a characteristic peculiar to the 1980s, a number of provinces had exhibited a persistent tendency toward deficit financing during the preceding two decades. Until the 1974–75 slowdown, however, the aggregate sector appeared to be in fairly good shape. Even during the early 1970s, however, the Atlantic provinces' PLH sectors were laying the foundation for sizable debt burdens. Newfoundland, in particular, accumulated a burden that would become a millstone around its neck for the next two decades.

Then came the economic slowdown of the mid-1970s. For most of the provinces east of Saskatchewan, it caused debt ratios to ratchet up — in Quebec and Manitoba, they doubled. At the same time, a number of factors, including inflation indexation and slower economic growth, combined to depress revenue growth but to keep expenditure on existing programs rising at the same pace as the economy. In Nova Scotia and Quebec, where expenditure had been allowed to increase particularly rapidly, the subsequent deficits were significant. By the 1981–82 recession, all these provinces except Prince Edward Island had net debt ratios larger than they had been in 1974, leaving the governments with the prospect of a credit-rating reduction. Tax increases appeared to some to be unavoidable.

Events unfolded somewhat differently in the three western provinces. Saskatchewan and British Columbia were the only two provinces in a net asset position at the time of the first oil price shock in 1973. Alberta had a net debt about the same size as Quebec's and almost twice the size of Manitoba's. The oil and gas boom that began that year rescued Alberta from the necessity of raising taxes while giving it the means to move into a strong net asset position. It was, in fact, the only province to escape the 1975 downswing. Saskatchewan and British Columbia also benefited from resource price strength and later from the depreciation of the Canadian dollar. In these three provinces, strong resource revenues made possible healthy increases in expenditure without the penalty of a deficit.

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[2] Where a significant proportion of the outstanding debt is denominated in foreign currencies, — for example, in Manitoba — appreciation of the Canadian dollar also helped to reduce reported liabilities.

Next came the 1981–82 recession. The unexpected severity of that downturn unleashed a debt shock wave that rolled from Atlantic to Pacific. Some provinces were forced to bail out their finances with tax increases at a time when their economies were drowning; the effects have been slowly flowing through their budgets ever since. The Atlantic provinces and Quebec, having increased the burden of taxation on their citizens to a worrisome level, now had to reduce the rate of expenditure growth below that of the economy. Their efforts were handicapped, however, by debt service, which grew rapidly during the 1980s. Those provinces that had allowed their expenditure to increase at a faster clip than their neighbors' during the 1970s — Newfoundland, Nova Scotia, and Quebec — were suddenly forced to make the greatest efforts at restraint. Other provinces — Ontario and Manitoba, for example — relied even more on revenue increases and made little effort to restrain expenditure growth. In Nova Scotia, Quebec, Ontario, and Manitoba, debt ratios went on rising until 1986 at least. Subsequent reductions in all but the three Maritime provinces did not come a moment too soon. Without the cushion of resource revenue, the west began to reap the consequences of unbridled expenditure increases. These provinces too had to face the difficult choice of cutting back programs or increasing taxes. Not surprisingly, the 1990–91 recession has hit most governments with no room for countercyclical action and, in many cases, presented them with the need to cut spending or raise taxes yet again.

The Importance of Long-Term Planning

The absence of multiyear planning at the provincial level has meant that deficits that increased because of cyclical or other disturbances — such as commodity price collapses — propagated deficits in subsequent years. Debt ratios have tended to ratchet up because there have been no firm strategies for bringing them down. Rather than being in control of their budgets, provincial treasurers have been more likely to be influenced by political expedience or the harsh realities of financial markets.

The balance-sheet problem has left virtually all of the provinces in a weak position to deal with a recession such as Canada is now experiencing. One danger is that tax increases — the inappropriate fiscal action that prevailed during the 1981–82 recession — could well be repeated in future slumps.

What is required is a medium-term fiscal strategy for responding to unexpected setbacks. Some provinces do include medium-term plans in their budget statements, but rather than setting out a serious game plan, they usually assume that the economy will continue to expand on trend and that programs and tax structures will continue unchanged. (Even less helpful are those budget documents that merely make a well-intentioned statement not backed up by any specific measures or estimates.)

Over the next decade, heavy public expenditures are likely to be needed at the PLH level in a number of areas: upgrading neglected local infrastructures; dealing with environmental threats — zebra mussels in the water systems and hazardous gases in school buildings, for example; investing in human capital. Governments must have the fiscal freedom to deal with these needs in a timely fashion. If they do not get their debt positions under control, they will be robbed of that freedom.

The Provinces and the National Debt

Many economists and policymakers now agree that large and rising public deficits and debt burdens are undesirable, absorbing too much domestic saving, making the Canadian dollar vulnerable to the moods of foreign lenders in the short and medium term, and risking impoverishment of the country in the long term. To concentrate solely on the federal share of the deficit problem is to attribute too much power — and hence responsibility — to the government of

Canada and not enough to the country's other ten governments.[3] The operations of the various levels of government are interlinked. The bulk of federal expenditure goes to benefit the citizens of the ten provinces. Direct payments to individuals, such as income-support. also directly benefit the provincial governments by increasing their tax base. As well, when the federal government provides certain goods and services, it permits the provincial governments to concentrate on other programs. Even the debt service that leaves the country is to pay for benefits bestowed in the past on citizens of the provinces, such as supporting them through a recession.

In a similar vein, neither level of government can ignore the taxing power of the other. In many cases, the two levels of government occupy the same tax fields and must recognize the risk of collectively "overtaxing" them. And in the end, the two levels are taxing the same taxpayers. Thus, if one level of government is spending too much or taxing too little, the solution can be reached only within the federal-provincial arena, not by unilateral federal action.

The reverse is also true. Provincial governments cannot reproach the federal government for the size of its debt burden and then criticize it for "shifting the burden on to them" if they do not help to find a solution. Rather, they must take part of the responsibility for the national debt and for finding ways to ease the burden.

A cooperative approach to the national debt problem implies that fiscal prudence needs a federal dimension. For example, if expenditure is to be cut, the provinces must support the federal government by, perhaps, taking a new approach to government functions such as health or postsecondary education. If federal revenues need to be raised temporarily to turn the debt burden around, some provinces may have to consider easing up their own taxation. Provinces that pursue their own fiscal agendas without regard to the constraint that doing so puts on the federal government's deficit-reduction plan are, therefore, not fiscally responsible in a national context, even though they themselves may be running a surplus.

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[3] I ignore here the governments of the two territories, since their finances are virtually in the hands of the federal government.

Accountability

Because provincial governments are free to reveal to — and conceal from — taxpayers whatever details they choose about their finances in whatever manner they like, it is difficult for taxpayers to judge the fiscal responsibility of their provincial government, let alone understand how much revenue is raised or how much is spent. Yet it is the taxpayers — the billpayers — who ought to be made as aware as possible of their total tax bill, the costs of the services that their government provides, and the province's balance-sheet position.

The money that is funneled through the PLH sectors dwarfs that of any major corporation. For example, the revenue raised by the Ontario provincial government alone is more than three times the sales revenue of George Weston Ltd. (including its subsidiaries such as Loblaws), and Quebec raises more than twice the sales revenue of Canadian Pacific Ltd. Yet, unlike public companies, governments need make no standardized accounting presentation of their activities.

A financial analyst making a recommendation about the stock of a public corporation is able to make comparisons with another corporation in the same industry because there is a common accounting system for both. Comparing provincial performances is, however, impossible from the budgets or even the public accounts of the provincial governments.[4] There may be no consolidated statement, or it may not conform to a universally accepted standard of comprehensiveness. The Canadian Institute of Chartered Accountants (CICA) has made recommendations, which some provinces follow,[5] but there are still shortcomings such as the exclusion of special funds and agencies carrying on activities of a government nature[6] and the inadequate treatment of unrecorded pension liabilities. Even if all the provinces met all of the CICA's recommendations, the consolidated statements would not include the operations of local governments and hospitals — a serious defect.

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[4] Such comparisons have to rely on Statistics Canada series, which try to put the provincial data on a consistent basis. However, such information is not familiar to the general public; neither is it timely. The information that is most accessible to the public and most timely appears in budget documents, which are the least comprehensive and comprehensible statements of the financial operations of governments.

[5] See, for example, Quebec, *Public Accounts 1988/89*, vol. 1, p. 42, and Manitoba, *Public Accounts 1988/89*, p. 1.

This absence of a common system of public accounting has also led to inappropriate treatment of some financial categories. One is fixed capital investment. Because cost is not amortized over the life of an asset, replacement of essential infrastructure has frequently been at the caprice of politicians rather than the dictates of good planning. Another problem area of public accounting — which has led to difficulties in federal-provincial fiscal arrangements, the federal income stabilization program, and provincial spending decisions — is the treatment of natural resource revenue. An unexploited nonrenewable resource is an asset, and when it is sold, it is merely converted to a financial asset; yet, by and large, revenue from natural resources is treated as current revenue.

These issues have no easy answers, since the financial structure and accounting needs of the public sector differ greatly from those of the private sector. But the present system is clearly inappropriate for guiding policy.

Government Costs

Governments that need to get their debt burdens under control are caught between the threat of a tax revolt and the rising costs of what is seen as a menu of necessary programs. Taxpayers inevitably will resent, and therefore try to avoid paying, taxes for which there is no perceived benefit. Two issues loom here: rising government costs — particularly public-sector wages — and the loss of voters' understanding of the connections between taxes and government services.

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[6] For example, although provincial governments are ultimately responsible for the future liabilities of their workers' compensation funds, information on the operation of these funds rarely appears in either the public accounts or the budgets.

The Growth of PLH-Sector Spending

In contrast with the general impression that governments are getting bigger and bigger, statistical evidence suggests that for about two decades the amount of "government" at the PLH level has not increased any more than the overall economy. But it does suggest that increases in the cost of delivering PLH goods and services outpaced those of the private sector, at least until the mid-1980s.

This development reflects the way government prices are calculated in the national accounts. The "price" of government-produced goods and services, such as education, health, and fire protection, is heavily influenced by the wages of public-sector employees, which have risen sharply in the past two decades. What we do not know is whether part of those wage increases reflected an increase in labor productivity. Statistics Canada assumes that the public sector never makes productivity gains, but in my view, it is highly improbable that there have been no productivity victories in any division of the public service.

The evidence does suggest that the cost of delivery was higher than necessary in some cases, but one has to be careful not to misplace the blame and then recommend the wrong remedy. In health care, for example, although a number of studies have pointed to the influence of new technology on the demand for service as well as the role of doctors in determining utilization of hospitals and laboratory services, governments appear to spend most of their energy keeping down salaries and fee schedules. Yet the probability is that the hospital sector is undergoing structural adjustments that require higher wages for its workers, especially nurses.[7] If governments resist these adjustments, a shortage of nurses could be more of a threat to health-care programs than an increase in salaries.

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[7] Another example: Quebec's expenditure per primary and secondary pupil rose much faster than Ontario's between 1972 and 1981. Although increases in Quebec teachers' salaries were partly responsible, the more important cause was a rise in Quebec's teacher-pupil ratio relative to Ontario's. Nevertheless, when the Quebec government took action in 1982 to bring the per pupil cost below Ontario's, it changed the ratio only slightly but took an axe to teachers' salaries. The result was that they moved from rough parity with Ontario salaries in 1982 to an average of almost $5,700 lower by 1988.

In spite of the difficulties of measurement and promotion of productivity gains, provincial and local governments need to keep trying to deliver the services that their citizens have shown they want in a way that encourages greater productivity. To make policy analysis more relevant, Statistics Canada should re-evaluate its assumption of zero productivity growth in the public sector.

The Demand for Government Programs

The ultimate consumers of public services are citizens, and demand for such services ought, therefore, to come from voters. The difficulty is that citizens have no way of knowing how increases in their taxes are related to a particular service. Even in the few cases in which provincial governments have levied health insurance premiums, for example, the revenue paid for a relatively small part of the total cost of health care; furthermore, the premium did not reflect the use that any patient made of the system. There are numerous examples of governments labeling a tax as if it were going to pay for a particular good or service, but budgets include no separate accounts to show how the revenue matches particular expenditure and why an increase in cost needs an increase in the tax. It may not be practical to have such a separation of revenue and expenditure, but governments can minimize factors that separate the links between these two, particularly the practice of running deficits during expansions.

Salient Points and Recommendations

Salient Points

- The PLH sector spends more and raises more revenue than the federal government — excluding intergovernmental transfers. Although the PLH sector is responsible for the three big functions of health, education, and welfare, all three levels of government contribute to the financing. In terms of direct expenditure on goods and services, the PLH sector's spending outweighed the federal government's by a factor of 3.5 in 1989.

- PLH-sector expenditure grew faster than trend GDP from the mid-1950s to the mid-1980s. The expansion of PLH-sector programs — especially in the big three functions — was a major factor until the early 1970s, but a rise in the cost of government goods and services relative to those in the private sector was a particularly important ingredient in the 1970s and 1980s.
- Conventional market signals determining supply and demand for PLH-sector services are, for the most part, not operative. There are also serious imperfections in public-sector labor markets such as for hospital or school board employees.
- Most of the present menu of PLH-sector programs was in place by the early 1970s, but, at the time of implementation, the future cost of maintaining those programs was not clear, to say the least. The growth of spending on such programs as health care and welfare assistance has made it difficult for governments to look after other important responsibilities, such as repairing and improving the public infrastructure or responding to new needs. This problem could get worse over the next decade, as the demand for capital expenditure at the local level and for environmental programs intensifies.
- All the provinces lacked fiscal prudence in the 1980s, as deficits were reduced or eliminated too slowly and taxes were relied on too heavily in that process. In general, expenditure control has only been undertaken when the adverse consequences of increasing the tax burden even further became a constraint.
- The willingness of many provincial governments and their taxpayers to borrow from the future for current needs has left some provinces — in particular, the "have-not" provinces of Newfoundland, Nova Scotia, New Brunswick, Quebec, and Manitoba — with serious debt problems, which activated the cancer of debt service within their expenditure. These five provinces now

have debt burdens that are a serious constraint on their fiscal maneuverability.

- The federal government's net debt was more than three times larger than the aggregate provincial-local sector's net debt at the end of 1989, but the provinces must, to some extent, share the responsibility for the federal problem and not the other way round.
- Provincial budget presentations are not transparent and the whole system of public accounting at this level fails the test of accountability.
- The many areas of shared federal-provincial responsibility have become serious sources of stress in the federation.

Recommendations

- Each level of government needs to take account of the effects that its fiscal policies have on the other. Stabilization policy should be coordinated, and actions taken by one level of government to increase Canada's competitiveness should not be negated by measures at the other level. The relatively high tax burdens in some provinces, particularly in Ontario and Quebec, are as much a product of the provincial governments' fiscal policies as the federal government's, and both levels of government need to re-evaluate the present arrangements of joint tax occupancy and expenditure responsibilities if that burden is to be mitigated.
- A stable debt-to-GDP ratio should not be used as an indicator of prudent fiscal policy in the PLH sector, especially since all but the least-advantaged provinces should share with the federal government the responsibility for reducing the burden of the federal debt. Debt ratios should, in fact, decline during expansions and policy should be vigorously aimed at this objective.
- Provincial and local governments need to continue to seek ways of delivering their goods and services more efficiently. What are

needed are improvements in productivity and reductions in unit costs — as well as ways of measuring both. PLH-sector labor costs must be watched, but draconian methods, such as wage freezes or slashing, may not get to the root of the problem — indeed, they may create problems of supply or quality in the public service. Public-sector wage levels and growth do, however, need to bear some relation to those in the relevant private sector as well as being made more responsive to changes in demand and supply.

- The coverage, costs, and financing structure of PLH-sector programs — particularly the big three of health, education, and welfare — need to be subjected to regular reviews to make them responsive to changed circumstances. In particular, uncertainty surrounding the future burden of the health-care system has made a new approach to delivery and cost-sharing imperative and urgent. The reality of lifetime education should push Ottawa and the provinces to move to a more appropriate splitting of the costs between the public and private sectors as well as between the two levels of government. Finally, the federal and provincial governments need to shift more rapidly toward an integration of their welfare and tax systems.
- Policies to mitigate income disparities should focus more heavily on people than on business or governments. Subsidies should be phased out, especially where they are the most onerous — in the prairie provinces — and investment in human capital and programs that facilitate labor mobility, geographically as well as occupationally, should be emphasized.
- Governments need to be more sensitive to the present level of Canadians' tax burdens and the risk that they pose for the shrinkage of the tax base and economic growth. In this connection, those provinces where the ratio of total government revenue to GDP has already reached 40 percent are likely putting their future economic potential at risk.
- Provincial governments should move to carefully thought-out medium-term budget planning.

- Provincial governments should cooperate with a body such as the Candian Institute of Chartered Accountants to develop a uniform system of public accounting for the PLH sector. In addition, an effort should be made to develop accounting techniques that would promote more responsible fiscal action. For example, the treatment of capital investment should incorporate the depreciation of the stock, and the impact of inflation on debt service needs to be taken into account.

1

An Overview of PLH-Sector Balance Sheets

Although the federal government's debt gets most of the attention, the provincial, local, and hospital (PLH) sector is responsible for about a quarter of the total net debt, which was more than 70 percent of GDP in 1989, at the end of a time of economic expansion. The deterioration in the PLH sector's debt position since the mid-1970s — a low point in the postwar years — has been almost as spectacular as the federal government's.

PLH-sector balance sheets worsened in all regions over the past decade and a half as fiscal policies in all provinces became less prudent. Although the "have-not" provinces had the worst net-debt-to-GDP ratios, there was considerable variation in performance. For example, Quebec, Manitoba, and Saskatchewan underwent a massive jump in their ratios, while the Atlantic provinces did not change much. Ontario, with its superior economic strength and its outstanding growth performance in the 1980s, underachieved badly in reducing the pressure on domestic saving and supporting national anti-inflation policies. British Columbia and Alberta need not have made such sizable contributions to the aggregate decline in the financial health of the PLH sector at various times over the past 15 years. Even Quebec, *though less advantaged than these three provinces, could have done more to control its expenditure growth and, in the process, its debt escalation.*

The failure to reduce provincial debt burdens more decisively during the 1980s has left the less-advantaged provinces with an unpleasant choice: taking politically difficult action to restrain the cyclical deficit rise caused by the recession or allowing their debt ratios to shift upward, bringing the penalties of lowered credit ratings. Provinces with stronger economic bases and lower debt ratios have less incentive to take procyclical action. Those that take the path of least resistance risk, once again, adding to the collective pressure on domestic saving during the next expansion.

* * * *

Most Canadians are aware of the federal government's continuing deficits and enormous debt. Commentators in the media decry the situation, politicians sugarcoat unpopular measures by saying they will help to alleviate the predicament, academics and other professionals turn out reams of studies on the circumstances, results, and possible solutions. "The public debt must go down" has become a cliché in the public consciousness.

What is often overlooked in such statements is that "public" is not synonymous with "central government." Canada has three levels of government — federal, provincial, and local[1] — as well as a huge quasi-public sector of which schools and hospitals form by far the largest part.[2] Although the federal government net debt is the major portion of the public debt, developments in the other layers of the public sector — provincial and local governments and hospitals, herein called the PLH sector — have been, and continue to be, a key element in the picture. Failure to focus on it leads many people to miss the *federal* nature of the public debt and consequently encourages the provinces to avoid their responsibility in finding a solution.

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[1] Some localities have more than one layer of local government. For example, the Montreal Urban Community and the Municipality of Metropolitan Toronto overlay the municipalities of Canada's two largest cities; counties are important units in eastern provinces. In some cases, these jurisdictions have taxing authority and make important fiscal decisions; the same is true of school boards. For the purposes of this study, I have used the approach of Statistics Canada's System of National Accounts, which defines the local government as comprising municipal governments, regional governments, and school boards. Local government enterprises, such as transit and utility commissions, are excluded.

This study begins to remedy that failure by examining the financial situation of the PLH sector in the context of the Canadian federation.[3] The rest of this chapter comprises a very brief background review plus a description of some of the analytical problems involved. Following is an assessment of developments in PLH spending (Chapter 2) and taxing (Chapter 3), with suggestions about the most likely influences on government activity. Chapter 4 goes beyond sectoral aggregation to evaluate the prudence of the fiscal policy of individual provinces. Finally, Chapter 5 considers how the PLH sector's debt situation affects the health of the Canadian economy and makes some specific suggestions about what the provinces could do to improve the situation. Appendix A presents a variety of fiscal data from all ten provinces, and Appendix B reviews the stresses and strains of fiscal federalism.

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[2] That is, publicly funded hospitals (not private hospitals) and publicly funded elementary and secondary schools (not private schools or colleges and universities). Hospital spending is, of course, almost entirely funded by direct provincial government transfers — parts of which, in turn, are transferred from the federal government. Much the same funding method is used for universities and various colleges, but they are not counted as part of the public sector because they are not quite as unambiguously "public" as hospitals — primarily because students pay fees but patients are responsible only for nonstandard ward coverage and minor services. Thus, the expenditure of postsecondary institutions is conceptually private, not government, consumption, and government funding to them is treated in the System of National Accounts as transfers to persons.

Some other quasi-public data are equally confusing. Governments set up numerous boards and commissions — for example, library boards and police commissions — to help them deliver goods and services. If the activity is of a predominantly commercial nature, such as transit operations, Statistics Canada generally classifies it as a government enterprise.

There are also inconsistencies in Statistics Canada's treatment of public-sector employees in its various surveys and measures. Thus, it is almost impossible to know the size of the public service in Canada or in a particular province.

[3] In 1989, the Canadian Tax Foundation sponsored a conference on provincial finances, examining various problems and issues against a background of studies of individual provinces as well as the whole sector. The conference papers, which are published as Melville McMillan, ed., *Provincial Public Finances*, vol. 1 *Public Surveys* and vol. 2 *Plaudits, Problems, and Prospects* (Toronto: Canadian Tax Foundation, 1991), deal with many of the issues raised in this study (as well as some that are not), but the focus is not as integrated.

Of Deficits and Debt

By year-end 1989, the net debt of Canada's federal and provincial-local (PL) sectors reached an estimated $460 billion, having risen in a single decade from 37 to 71 percent of GDP (see Figure 1.1).[4]

The first part of that surge was not surprising or dangerous. A major recession, such as that of 1981–82, can be expected both to drop GDP growth and to increase the government-sector deficit. The ratio's jump of 15 percentage points between 1981 and 1983 was, therefore, not particularly unsettling. During the following three years, however, the ratio underwent an even larger rise of 16.6 percentage points. Surely, the extent of that continued deterioration was perverse. The expansion of 1984 to 1986 was strong — real GDP grew between 3.3 and 6.3 percent a year — so one would have expected a much smaller increase in the ratio and a stabilization before 1988.

The problem is a relatively new one for Canada. From 1946 to 1976, the current operations of the government sector were a source of domestic saving in all but one year. Although heavy capital investment involved an ongoing recourse to foreign markets, net debt service was not a great burden; for example, it never reduced Canadians' gross national income by more than 1 percent a year from 1962 to 1975. By contrast, since 1984, the government sector has been competing with business enterprises and households for limited increments to the flow of domestic saving, forcing up interest-rate spreads and increasing the borrowing to be done in foreign

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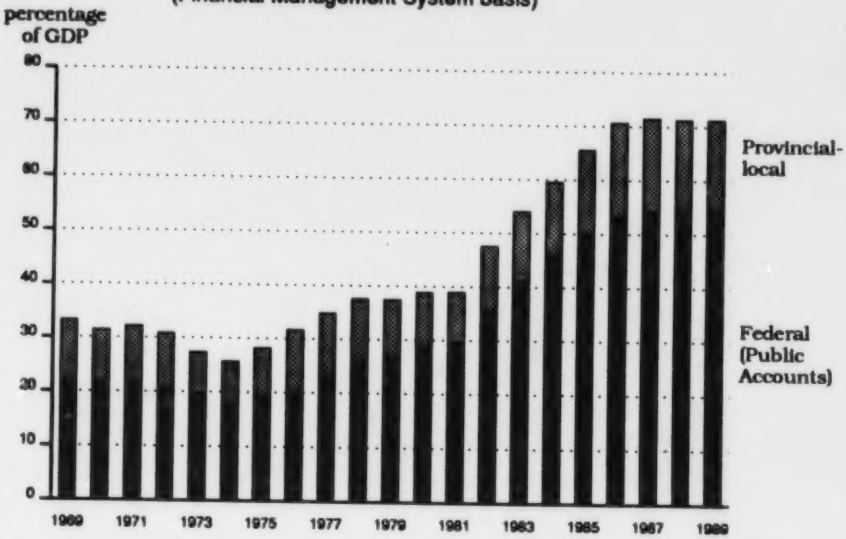
[4] The 1989 net debt of the federal government was taken as calculated by the Department of Finance, according to its method of public accounting, which closely resembles the Financial Management System (Canada, Department of Finance, *Public Accounts 1990–91*, vol. 1, p.26). Hospitals, however, are not part of the Financial Management System. I have estimated the provincial-local sector's net debt on a similar basis. Systems of measurement of government activity are discussed later in this chapter.

Figure 1.1: ***Net Debt in the Federal and Provincial-Local Sectors, 1969–89***

(Financial Management System basis)



Notes: Provincial-local data have been adjusted to remove Quebec Pension Plan distortions. Provincial-local data for 1988 and 1989 are estimates; federal data are all actual.

Source: Author's calculations, using data from Statistics Canada and Canada, Department of Finance; GDP data are from Statistics Canada, *National Income and Expenditure Accounts*.

markets. In fact, Canada's persistent government-sector dissaving has dampened the rate of national saving.

Government borrowing during recessions is, of course, prudent and in Canada's case is not likely to crowd private borrowers out of domestic markets. Government borrowing for capital investment is also often desirable — since the benefits are likely to be spread over future generations — presuming that the returns meet a cost-benefit test: the increases to GDP that the borrowed funds generate should exceed the service cost of the debt. The point is, however, that governments should balance their current operations budgets over the business cycle. Had the public sector done so in recent years, that balance should have moved into surplus after about 1984, and this surplus would have offset part of the deficit on the capital budget.

That the combined federal and PL-sector net debt increased at the same rate as the economy in the second half of the 1980s is witness to the lack of intergovernmental cooperation in dealing with the serious problem of public-sector competition for domestic savings during expansions. The PL sector's contribution to the saving-investment imbalance may appear to be small in comparison with the federal government's, but the actions that prevented the aggregate net debt ratio from declining were interrelated. Furthermore, the PL sector's debt ratio is a composite of high- and low-ratio provinces, and neither group did enough to alleviate the situation. The weakness in commodity prices and the impact of the 1990–91 recession on central Canada suggest that, during the 1990s, the aggregate PL-sector net position will be less likely to be insulated by provinces with low debt ratios.

International Comparisons

During the 1980s, Canada's economic performance was one of the best of the 14 major nations of the Organisation for Economic Co-operation and Development (OECD). Yet its net public debt as a percentage of GDP was higher than that of ten of those nations — and of five of the other members of the Group-of-Seven (G-7) countries. The deterioration (rise) of its debt-to-GDP ratio was the worst of any of the 14 major OECD countries.

Source: Organisation for Economic Co-operation and Development, *Economic Outlook*, no. 47, June 1990, Table 33, p. 119.

Deficits and Debt at the PL Level

The previous paragraphs suggest what professional analyses and popular reports tell us so often: the federal government has not been able to control its debt load in recent years. At first glance, provincial and local governments and hospitals, taken together, appear to have been models of fiscal conservatism. From 1950 until the expansion of the 1980s, revenue growth closely followed expenditure growth and, until the mid-1970s, aggregate deficits were relatively small. They did explode following the 1974–75 contraction, but there was a rapid improvement in the consolidated PL-sector deficit over the next three years, when the federal government's situation was deteriorating markedly (see Figure 1.2). In 1980, the brief recession caused a setback for all governments; only a brief respite then followed before the full effect of the 1981–82 recession was felt and the PL sector's deficit-to-GDP ratio moved into the 2-percent range. The ratio began to improve in 1984, but the commodity price collapse temporarily increased the PL sector's deficit over the following years. By 1988, the sector had achieved a surplus of $1.5 billion through a combination of discretionary tax increases, the effect of the strong expansion on revenue in most provinces, and strong growth of GDP. Unfortunately, that improvement was short-lived, and 1989 revealed a $700 million deficit.

Consider two facts, moreover. First, during the entire 1950–89 period, the PL sector managed to achieve a surplus in just three years. Second, if one adjusts the balances to take into consideration the surpluses of nontrusteed superannuation funds and workers' compensation boards as well as the oil and gas royalties received by the western provinces,[5] the performances begin to look much less impressive. In fact, adjusting only for the superannuation contributions and pensions reduces the 1988 surplus to $800 million and doubles the 1989 deficit.

With an adjustment for the major distortions from social security and pension funds, the aggregate PL sector's net debt had reached 17 percent of GDP in 1987, up from 8 percent in the mid-1970s. I estimate the 1989 ratio to be about 16.5 percent. When the PL sector's net debt ratio is added to the federal government's almost 55 percent (measured in a similar fashion), the total at the end of 1989 was more than two-and-a-half times larger than it was in the mid-1970s (see Figure 1.1). Such an increase is unprecedented

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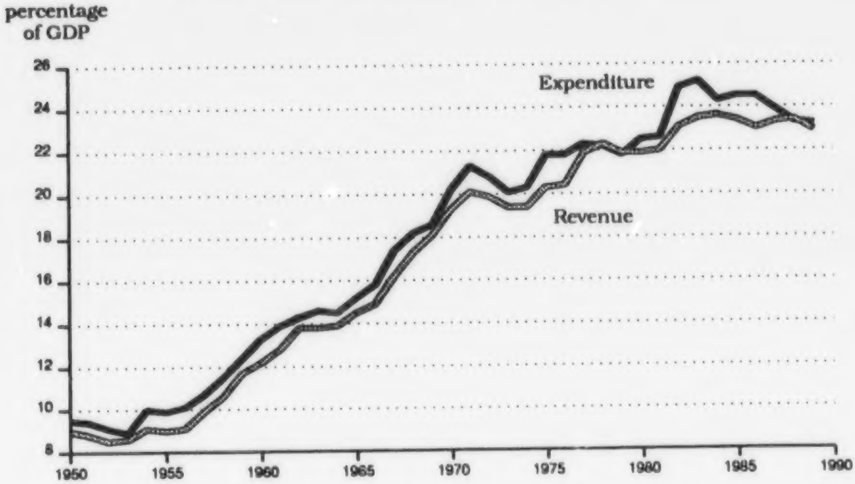
[5] See the discussion later in the chapter on the reason for these adjustments.

Figure 1.2: ***Revenue and Expenditure in the Provincial-Local Sector as Percentages of GDP, 1950–89***

(National Income and Expenditure Accounts basis)



Notes: Expenditure data have been adjusted to remove public service superannuation fund distortions; excludes capital consumption allowances.

Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

during peacetime. A major proportion of the borrowing was incurred because of cyclical factors, yet the recoveries from the two contractions after 1972 were soon followed by expansions strong and long enough for governments to have been able to reduce their debt ratios.

In brief, most of the provincial governments, like the federal government, showed a surprising tolerance for continuous and sizable deficits from the mid-1970s onward. One result was the emergence of a debt-service problem as a serious policy constraint in some provinces. When finally the threat of a credit downgrading forced their hands, they were even more inclined than the federal government to turn to revenue increases, rather than to expenditure cuts. Furthermore, the timing of these restrictive measures was often quite inappropriate in terms of the business cycle.

Provincial Variations

The aggregate figures discussed so far hide a variety of fiscal situations across the country. From 1977 to 1981, the PL sectors of the three western provinces had healthy surpluses, with Alberta's averaging well over 6 percent of provincial GDP. The same sectors of the other provinces ran deficits throughout this period, with Quebec's at the high end averaging close to 4 percent of GDP. From 1986 to 1988, the combined deficits of the three western provinces were more than 2 percent of GDP, while Ontario was in surplus.

Although the debt position of the PL sector deteriorated in all regions between the mid-1970s and the late 1980s (see Figure 1.3), Newfoundland's debt-to-GDP ratio — by far the highest in the country — did not deteriorate much between 1975 and the end of the 1980s. On the other hand, Quebec's and Manitoba's debt ratios worsened markedly during that time. On a per capita basis, Quebec's net debt was considerably worse than Newfoundland's by 1989 (see Table 1.1).

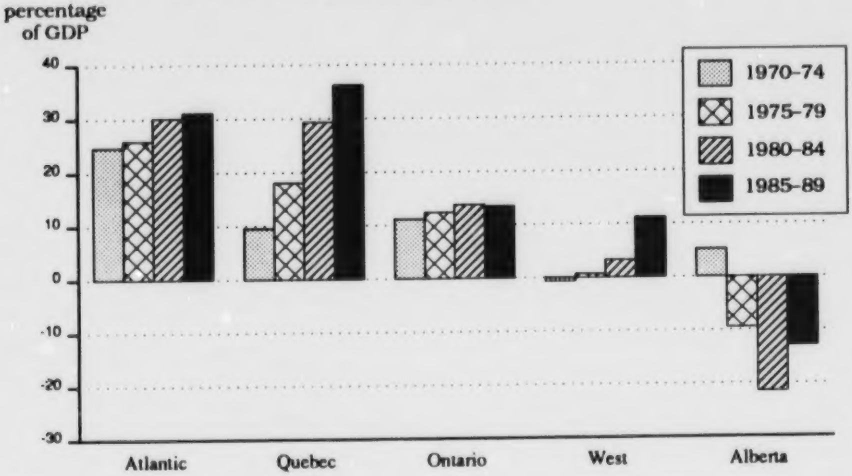
A province-by-province examination of the PL-sector data for the past three expansions suggests that, on the whole, individual governments ran less prudent fiscal policies after the mid-1970s than in the 1970–74 period (see Table 1.2).

During the 1970–74 period, only Newfoundland and Quebec allowed their debt ratios to worsen in the face of strong real GDP growth. Nonetheless, the improvement in the balance sheets of the three most advantaged provinces — Ontario, Alberta, and British Columbia — can only be described as disappointing, given the real growth they experienced. For example, real growth in Nova Scotia and Manitoba was about the same as in Ontario, yet both of them reduced their debt ratios more than did Ontario.

The expansionary 1977–79 period was marked by enormous discrepancies in real economic growth. Once again, Newfoundland's and Quebec's debt ratios worsened. The economies of four provinces — Newfoundland, New Brunswick, Alberta, and British Columbia — did very well, reflecting the strength of resource prices. Alberta made a large improvement in its balance-sheet position, but New Bruns-

Figure 1.3: ***Debt-to-GDP Ratios in the Provincial-Local Sector, by Region***

(Financial Management System basis)



Note: "West" excludes Alberta.

Source: Author's calculations, using data from Statistics Canada and Canada, Department of Finance. Provincial debt figures for 1988 and 1989 are author's estimates; GDP data are from Statistics Canada, *Provincial Economic Accounts*.

wick and British Columbia made only small advances. Even though the other provinces did not enjoy such buoyant growth, it would have been reasonable to expect that they would at least hold the line on their debt ratios. As it was, debt ratios were allowed to worsen in all provinces except Saskatchewan, which also had the worst economic growth in the country. Quebec's debt-ratio increase, taken in the context of its real GDP growth, was second only to Newfoundland's.

In the first part of the 1986–89 period, Alberta and Saskatchewan were still in the throes of recession. In the other eight provinces, given their generally healthy growth rates, the progress made on debt ratios was generally inadequate. The ratios actually worsened in Nova Scotia and Manitoba. Quebec once again underachieved, but Newfoundland, plagued by the largest ratio in the country, made a substantial reduction (see Figure 1.4).

Table 1.1: ***Provincial and Local Per Capita Net Debt and Debt-to-GDP Ratios, 1989***

(Financial Management System basis)

	PL Net Liabilities/ Financial Assets		Share of Federal Debt	Federal and PL Debt-to-GDP Ratio
	Total	Per Capita		
	($ millions)	*(dollars)*	*($ millions)*	*(percent)*
Newfoundland	–3,550	–6,217	7,795	135
Prince Edward Island	–282	–2,169	1,775	108
Nova Scotia	–4,698	–5,302	12,094	105
New Brunswick	–3,265	–4,541	9,815	103
Quebec	–53,279	–7,962	91,350	95
Ontario	–30,328	–3,166	130,760	59
Manitoba	–5,944	–5,478	14,811	88
Saskatchewan	–2,714	–2,695	13,746	84
Alberta	4,002	1,652	33,076	44
British Columbia	–3,717	–1,217	41,675	59
Yukon & NWT	228	2,926	1,065	29

Note: Federal debt has been allocated according to population. Data are at December 31, 1989.

Source: Author's calculations, using data from Statistics Canada and Canada, Department of Finance; provincial debt figures are author's estimates.

Among the Atlantic provinces, economic disparities do not explain the variations in debt performance. Nova Scotia is better off than the other three by most measures, and although it had a somewhat poorer economic performance than New Brunswick over the past 20 years, the difference does not seem sufficient to account for the much greater deterioration in the former's debt ratio. Nova Scotia's relatively greater lassitude about deficit reduction was particularly evident in the 1980s.

In the case of the two central provinces, Quebec suffered a massive increase in its debt ratio during the 1970s and 1980s, while Ontario's was about the same in 1989 as it was 20 years earlier. This difference in performance cannot be explained entirely by Quebec's somewhat weaker real growth over this period. Even in the second half of the 1980s, Quebec's improvement was smaller than Ontario's,

Table 1.2: *Changes in Real GDP Growth and Provincial-Local Debt Ratios, 1970–89*

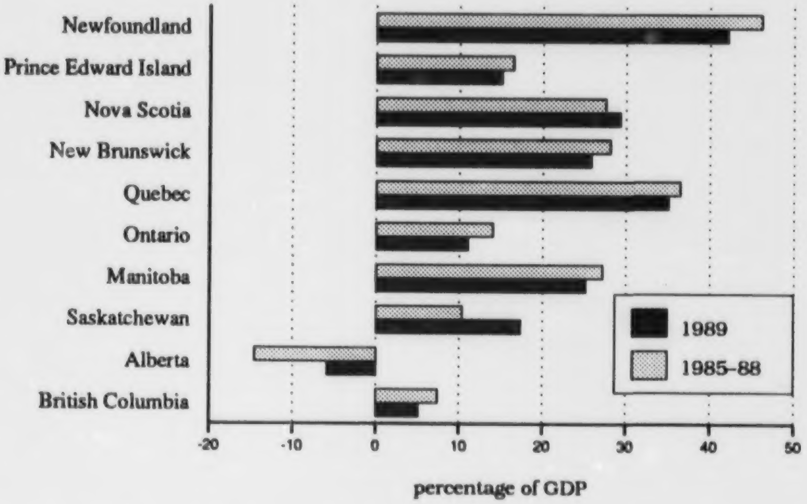
(Financial Management System basis)

	1970–74		1977–79		1986–89	
	% Change in GDP	Change in Debt-to-GDP Ratio	% Change in GDP	Change in Debt-to-GDP Ratio	% Change in GDP	Change in Debt-to-GDP Ratio
Newfoundland	30.5	1.6	21.3	4.7	16.8	–5.6
Prince Edward Island	43.4	–12.9	11.3	0.9	26.3	–2.2
Nova Scotia	31.1	–2.7	10.4	0.8	16.2	1.5
New Brunswick	40.3	–4.9	20.3	–1.9	21.9	–2.6
Quebec	29.5	0.2	10.2	3.7	19.8	–1.6
Ontario	30.7	–1.2	8.7	1.3	24.1	–4.3
Manitoba	30.4	–3.9	7.5	2.8	14.5	2.5
Saskatchewan	44.1	–8.3	5.2	–1.1	–0.9	10.9
Alberta	63.5	–6.1	36.5	–15.5	–13.0	14.5
British Columbia	44.0	–1.7	21.6	–2.7	22.5	–3.1

Sources: GDP data at factor cost are from Statistics Canada, *Provincial Economic Accounts*, deflated by the author, using final domestic demand deflators from the Provincial Economic Accounts for 1970 to 1989. Data on net debt from Statistics Canada and Canada, Department of Finance; data for 1988 and 1989 are author's estimates.

Figure 1.4: ***Debt-to-GDP Ratios in the Provincial-Local Sector, by Province***

(Financial Management System basis)



Note: Data for 1988 and 1989 are author's estimates.

Source: Author's calculations, using data from Statistics Canada; GDP data are from Statistics Canada, *Provincial Economic Accounts*.

a difference that does not appear justified by the former's somewhat less buoyant growth. Nevertheless, Ontario's achievement during the 1980s appears paltry in the face of the extraordinary gains in real GDP it experienced after 1983.

Among the four western provinces, Manitoba's provincial and local-sector balance-sheet position deteriorated the most over the 20 years to 1989, although, on average, its economic growth virtually matched that of Saskatchewan. The long-term rise in its debt ratio as well as its average real growth rate were comparable to Quebec's. The other three western provinces are the only ones to have been in a net financial asset position at any time during the past two decades or so. Saskatchewan and Alberta achieved similar net asset ratios by the mid-1970s, but at about the same time British Columbia fell from a net asset to a net debt position. The balance-sheet positions of all three improved from then into the 1980s, although Alberta's outstripped those of the other two by a huge margin. British Columbia, in fact, barely regained its net asset status and held onto it only briefly. From their different heights, all suffered major deteriorations in balance-sheet health, with Saskatchewan returning to a net debt position.

In the two expansions of the 1970s, Saskatchewan, Alberta, and British Columbia had above-average real growth, with Alberta's being phenomenal. Against that backdrop, the increases achieved in net-asset-to-GDP ratios were not remarkable. Indeed, one could call them disappointing, particularly in the case of British Columbia. The failure throughout the west to take advantage of good times in order to build up healthy balance sheets appears very short-sighted in the light of the post-1985 experience. It is true that British Columbia took a long time to recover to its prerecession economic output and Saskatchewan suffered some very severe shocks, but the former should have been able to return to a net financial asset position and the latter could have gone into its crisis with a larger net asset ratio. Even Alberta, which is now the only province in a net asset position, really has no excuse for such a weak financial asset ratio. It may lack the robustness that more diversified Ontario has, but its rich endowment of resources, the real growth it has experienced over the past two decades as a whole, and the propensity of a large proportion of its unemployed to leave the province when times are tough all lead to the expectation of a proportionately greater contribution to the financial health of its aggregate PL sector.

In brief, complacency about balance-sheet health in the second half of the 1970s, which showed up in the running of a series of sizable deficits and the related failure to correct already large debt ratios, left a number of provinces in an extremely vulnerable position at the onset of the 1981–82 recession. For most of them, the threat of credit-rating downgrading left little choice but belated introduction of tax increases. Only in Prince Edward Island, however, were these increases able to prevent a rise in the debt ratio. Consequently, after 1981, most provinces' credit ratings were lowered, in large part because of what Standard and Poor called their "substantial operating imbalances."[6] After the recession, the large debt ratios that most of the provinces faced combined with high interest rates so that debt-service costs ate an ever-larger share of revenue and constrained their program expenditure flexibility. Meanwhile, the strong growth years of the 1980s slipped by with only meager progress on deficits. Most provinces were in a very embattled position as their economies headed into or flirted with recession in 1990. With two levels of government trying to keep the lid on their deficits and debt burdens, there is little hope for tax relief, and another round of credit-rating downgrading threatens in the near term.

Accounting and Accountability

Before I turn to the detailed analysis of this study, a few words on the handling of data are in order. The difficulties are so numerous and so annoying that one is tempted to suggest that they are partly responsible for the paucity of provincial and PLH-sector studies.

Speaking very roughly, one can divide the questions about accounting and accountability into six categories:

- What data should be recorded in what categories? What subdivisions should be used for expenditure and for receipts?
- Where is the line between the capital and the current accounts? Should, for example, monuments and museums be counted as investment in fixed capital? What about investment in human resources, as reflected in education, training, and health care? And how should depreciation be treated?
- How should inflation in the public sector be handled? What statistics need to be available in both constant and current dollars — for example, should there be separate deflators for each level of government?

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[6] Standard and Poor, *Creditweek*, August 8, 1988, p. 10.

- What is an asset and what is a liability? What assets and liabilities are appropriately included in government-sector balance sheets. Should the assets of funds that have unrecorded liabilities — such as workers' compensation boards — be excluded from calculations of provincial governments' net debt?
- What are transfers? Should they include tax expenditures that substitute for subsidies to individuals or businesses?
- What is the purpose of public accounting? If there is truth in the standard answer — to tell taxpayers (and their elected representatives) how their money is raised and spent, to elucidate the fiduciary role of government — what can one say of the shell games that governments seem to play so often? Given the varied and increasing demands for services, the complexity of public finances, and the pressure of several levels of taxing authorities and transfer sources, it must be particularly tempting for governments in Canada to shuffle income and expenditure programs frequently. Yet, is the possibility of breaking down some tax resistance worth further confusing public understanding of the relationship between paying taxes and getting public services?

The rest of this chapter deals with some basics of the first three points, which are also mentioned at appropriate places throughout the text. The smoke and mirrors of public accounting and fiscal illusion — complicated by the federal-provincial tension intrinsic to Canada — are a focus of Chapter 5, although they too must be mentioned throughout the book.

FMS and SNA Series

Few of the problems in analyzing the PLH sector stem from a lack of data. Indeed, there is such a plethora of information that it can be difficult to know what to do with all of it and a challenge to ensure that statistics are comparable.

Statistics Canada offers not one but two series of public finance data: one based on the Financial Management System (FMS) and the other on the System of National Accounts (SNA). The SNA includes a national series, the National Income and Expenditure Accounts (NIEA), which give aggregate Canadian data for each level of government, the hospital sector, and the country's two social security plans (the Canada Pension Plan and the Quebec Pension Plan), as well as the Provincial Economic Accounts (PEA), which give corresponding data by province. The FMS data are available for the three levels of government only; provincial and local data are available by province.

The FMS and SNA differ in basic orientation. As Statistics Canada explains:

> For purposes of the Financial Management System, government is defined on an ownership basis and data on its financial transactions are oriented toward depicting its overall position as a provider of specific services. Under the Canadian System of National Accounts the ownership concept is subordinate and government is defined in terms of its particular role in the economy; data on government financial transactions are oriented toward reflecting economic impact.
>
> Both these measures of government financial activity are valid; each has its purpose. The two sets of data are related and to each can be added some of the dimensions of the other but clearly the measures are not of one and the same identity; they differ in approach and do not address the same phenomenon [sic].[7]

The data given by the FMS and SNA series differ in two ways that are of immediate importance to even the most superficial analyst:

- FMS data are in current dollars only; some SNA data are available in constant as well as current dollars.
- FMS data are divided by functional category; for expenditure, for example, they include education, health care, and police protection. There is no split between current and capital transactions. The categories for SNA data are economic: for expendi-

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[7] Statistics Canada, *The System of Government Financial Management Statistics*, Cat. no. 68-507E (Ottawa, 1984), pp. 105–106.

ture, consumption spending, capital formation, transfers, and interest on the public debt.

Taken together, these two facts present the analyst of provincial data with an interesting challenge: details on expenditure — especially spending on health care outside of hospitals, education, and other services that loom large for the provinces — are available only in current dollars.[8] Moreover, the functional breakdown of spending mixes current and capital items.

The difference between the current and constant-dollar figures is often interesting. For example, if calculations are done in nominal figures, the ratio of total government expenditure to GDP doubled from 20 percent in 1948 to 40 percent in 1989. When the calculations are done in constant dollars, the rise is smaller — from more than 25 percent to less than 40 percent over the same period. The implication is, of course, that inflation in the government sector has exceeded overall inflation — a point discussed in several places later in this study.[9]

Measuring Assets and Liabilities

Another problem in the data is in the recording of assets and liabilities. How these are handled can make a considerable difference in the picture of a government's financial health. There are conceptual difficulties here that are compounded by Canada's multiple levels of government.

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[8] Statistics Canada has promised that, in the future, the classification of financial management data in economic terms will be modified and a functional breakdown of the government-sector expenditure of the SNA will be developed. For this study, however, I have had to make do with the available data or calculate adjustments myself.

[9] Specifically, the SNA provides constant-dollar data as well as nominal current-dollar data on consolidated government spending on current goods and services, fixed capital, and inventories. Such data for the whole country are available in the National Income and Expenditure Accounts from 1926, but only since 1980 have these consolidated constant-dollar data been available, along with final domestic demand data, by province (in the Provincial Economic Accounts annual series starting in 1971). The constant-dollar data have some annoying omissions: there is no breakdown by level of government and no estimate of GDP by province. It is also worth noting that in 1990, Statistics Canada rebased its constant-dollar series to 1986 dollars. To avoid a mass of recalculations, however, I have used 1981 dollars for the consolidated data throughout this study, an approach that does not appreciably affect the growth rates or ratios used.

Much of the potential distortion comes from various social security funds — the Canada Pension Plan (CPP), operated by the federal government on behalf of nine provinces; the parallel Quebec Pension Plan (QPP); the nontrusteed public service superannuation funds (PSSFs) of various provinces — as well as the surpluses and deficits of the provincial workers' compensation boards (WCBs). The amounts involved are sizable. For example, WCB receipts were $1.3 billion more than expenditure in 1989, and CPP/QPP assets totalled $51.6 billion at the end of that year; over the past 20 years, the accumulated WCB surpluses totaled $8.5 billion and the excess of provincial-sector PSSF contributions over pensions totaled $11 billion.

CPP/QPP. The SNA adds social security fund operations, such as those of the CPP and QPP, to aggregate public-sector saving, while the accumulated surpluses increase the public sector's financial assets, reducing the sector's measured net debt. Yet the surpluses are most often borrowed by various governments or their agencies, which must make provision for servicing and repaying them. Furthermore, many of these funds carry with them considerable unfunded liabilities, which are not recorded but which will increase future liability.

In the FMS estimates, CPP assets are inappropriately included in the federal government sector. Since these funds are almost entirely lent to the PLH sector, they are appropriately included in its liabilities. The QPP is a simpler case; the funds that are lent to the Quebec government are included in that government's liabilities and the surpluses are also added to its assets.

Although the assets of the two plans certainly belong in the public sector, it is inappropriate to add them to the governments' balance sheets, particularly since they are unfunded and, therefore, carry with them future financing obligations, which are also unrecorded.[10] The SNA, however, separates the CPP and QPP from the three levels of government.

Superannuation Funds. The SNA measure of PLH-sector financial assets has a major upward bias because of the inclusion of the accumulated surpluses of the nontrusteed superannuation accounts of most provincial governments, particularly those of Newfoundland, Quebec, Ontario, and Alberta. Contributions to these PSSFs are added to provincial revenue and pensions are added to provincial expenditure. Thus, the surpluses reduce the SNA-measured deficits and the accumulated surpluses reduce the net debt. When governments borrow these surpluses, the interest paid becomes an expenditure, but in the SNA it is also shown as a receipt, further reducing the measured deficits. Like the CPP and QPP, some of these funds have large, unfunded liabilities that are unrecorded.[11]

The FMS measure of net debt, which approximates the public accounts methods of the various governments, eliminates the upward bias, showing the surpluses as liabilities of the governments that borrow them.

The SNA data in this study have been adjusted to exclude PSSF contributions and pension payments but not the interest received by the funds (since Statistics Canada does not itemize the latter data).

Workers' Compensation Boards. In both the SNA and FMS, the revenue and expenditure of the WCBs are also included with the revenue and expenditure of the provincial governments but not in the public accounts. The accumulated surpluses or deficits are, therefore, included in the net debt measures in this study. Some WCBs also have unfunded liabilities, for which provincial governments are responsible, that are not all recorded.

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[10] At year-end 1988, the unfunded actuarial liability of the CPP was estimated to be between $307 billion and $342 billion (Canada, Office of the Superintendent of Financial Institutions, *Canada Pension Plan Eleventh Statutory Actuarial Report, as at December 31, 1988*, p. 75). Statistics Canada removed the CPP and QPP from the FMS estimates of federal and Quebec government revenue and expenditure in 1991.

[11] For example, at March 31, 1989, the unrecorded cost of accrued benefits of Quebec government retirement plans was estimated to be almost $10 billion. See Quebec, Public Accounts 1988/89, p. 41.

Borrowing from the Funds

Provincial governments do the bulk of their debt financing through long-term bonds; for some provinces, nonpublic sources of funds have played a major role. Since 1966, CPP surpluses have been offered to the nine participating provinces in proportion to their contributions.* Quebec has access to QPP surpluses through the Caisse de dépôt et placement, which manages them. These two funds account for more than 25 percent of the provinces' outstanding bonds.

The Ontario government borrowed funds from the Ontario Municipal Employees' Retirement system until 1978, and it continued to borrow the net cash flow of the teachers' and public service pension funds until 1989. It still borrows the balance of the Province of Ontario Savings Office, although this is relatively minor — about $315 million in 1991.

The investment income of the Alberta Heritage Savings Trust Fund reduces the Alberta government's dependence on public markets. British Columbia also has used sizable internal-fund surpluses in the past.

* The coupon on these bonds is set at the same rate as long Government of Canada bonds with a two-month lag.

Definition of PLH-Sector Net Debt

Although the SNA National Balance Sheet Accounts do not include the QPP assets in the PLH sector, the inclusion of the nontrusteed superannuation fund assets is an insurmountable problem. The exclusion of the hospital sector is a minor problem. In this study, therefore, I have used the FMS measure of PL-sector net debt for the PLH sector, adjusted to exclude such distortions as QPP assets, and the public accounts measure of the federal net debt, which avoids such distortions.

Investments

Separating current expenditure from capital investment is a problem for all accounting, public and private. Because government deficits may be justified for investment purposes, it is particularly unfortunate that more satisfactory ways of measuring changes to the stock of capital have not yet been developed for the public or national accounts.

Human Capital. Logically, *capital investment* should refer to investment in human capital as well as investment in plant and equipment. Unfortunately, there are no accepted measures of that investment component of government spending on education — or on health care, for that matter. If such a measure were developed, it would have to include in current expenditure the depreciation of the stock — as the SNA does in treatment of fixed capital — and the proportion that represented the consumption component of education and health-care expenditure.

Fixed Capital Investment. Some so-called investment expenditure by the government sector does not add to the productive potential of the economy and would be better treated as current expenditure — as is all defense spending. Examples of this type of spending are monuments and museums.

Nonrenewable Natural Resources. All methods of government accounting fail in the treatment of nonrenewable resources. Statistics Canada, following international accounting practice, simply includes the proceeds of the sale of such assets as an addition to an operating surplus, part of which is distributed to governments.[12] Although oil and gas extraction involves the depletion of an asset, no account is taken of this consumption. This treatment artificially improves the government operating balance and change in assets.

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[12] Work has begun, however, on how to deal with the depletion of natural resources as well as expenditure to repair environmental damage and environmental degradation in the system of national accounts. See, for example, Yusuf J. Ahmad, Salah El Serafy, and Ernest Lutz, eds., *Environmental Accounting for Sustainable Development* (Washington, D.C.: World Bank, 1990).

Of those provinces that have nonrenewable resource revenue, Alberta stands out as having made the earliest and most far-reaching effort to recognize the capital nature of its resource revenue. Even so, no more than 30 percent of this revenue was ever set aside in the Alberta Heritage Savings Trust Fund, and since April 1987, all of it has been added to general revenue.[13]

Transfer Payments

The SNA treatment of some tax expenditures seems particularly perverse to an economist.[14] Tax credits, such as provincial property or sales tax credits, as well as personal income tax credits and deductions, are really substitutes for direct payments and, in principle, should be added to redistributive expenditure. They are not, however, included in the SNA report of transfers and are completely netted out of revenue. Refundable tax credits only are added back in the FMS series and in some public accounts presentations. This failure to fully account for tax expenditure is a serious shortcoming of the measure of the distributive function of government.

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[13] For an in-depth look at the whole problem of the way national income accounts treat natural resources, see Robert Repetto, "Wasting Assets," *Technology Review*, January 1990, pp. 39-44.

[14] Beginning in the fourth quarter 1990, Statistics Canada is recording the goods and services tax credit as a transfer to persons. Although Manitoba introduced an annual tax expenditure account in its 1986 budget — it was discontinued with the change of government in 1988 — and Ontario included an account in its 1988 financial statement, no historical series or set of comparable estimates by province of all tax expenditure is available. See John L. Howard and W.T. Stanbury, "Appendix to Measuring Leviathan: The Size, Scope, and Growth of Governments in Canada," in George Lermer, ed., *Probing Leviathan: An Investigation of Government in the Economy* (Vancouver: Fraser Institute, 1984), p. 152.

2

An Anatomy of Expenditure

Total expenditure in relation to economic activity constitutes one measure of the size of government. By this gauge, government in Canada at the end of the 1980s was double the size of that of the early 1950s and 15 percent larger than that of the early 1970s. Another measure is government expenditure in constant dollars per capita, which was almost 80 percent higher in 1989 than it had been in 1971. By either criterion, the Canadian provincial-local-hospital (PLH) sector is considerably larger now than it was four decades ago. Most of this growth took place before 1972, however, as the welfare state came into being. Over the past 15 to 20 years, there has been a marked moderation in the growth of PLH-sector expenditure relative to GDP. In real terms, program expenditure is now roughly the same proportion of GDP as it was at the beginning of the 1970s, while interest on the debt is much larger.

For most of the past 40 years, the prices of government services have risen faster than average prices. One result is that it now takes a third more national income than in the first half of the 1950s to deliver a given quantity of PLH-sector programs. In fact, although the PLH sector's real program expenditure in 1989 was about the same proportion of GDP as in 1973, it took 10 percent more GDP to pay for it.

This rising cost, combined with the PLH sector's growing share of debt service for past expenditure, has created a difficult environment for dealing with urgent and expensive capital projects, such as public transit and water treatment systems, and programs in pressing areas, such as the environment, child care, and social welfare reforms.

As additional expenditure has been added to existing program costs, financing constraints have become an issue. Provincial governments in the 1980s became squeezed by the federal government in the battle over tax room and cash transfers; even in the wealthy provinces debt service and balance sheets have become a concern. Nevertheless, most provinces have permitted the major functions of education, health, and welfare to grow more rapidly than was warranted by considerations such as demographic changes or efficiency of delivery.

Productivity is clearly a problem in all aspects of the PLH sector's responsibilities, as are wage-rate increases in the civil and para-civil service. Wages that are too far below the competition in the private sector risk diluting the quality of administration or causing unacceptable labor shortages in professions such as law enforcement and nursing. Nevertheless, rewards in the civil and para-civil service need to bear some relationship to an appropriate measure of output; in the present system, they reflect some other criterion more often than not.

The delay in dealing with the issues of more efficient delivery systems of health and precollege education, the appropriate cost split of postsecondary education, and the social welfare system's disincentives to work has left most provincial governments to face a difficult decade in which the economy is likely to make only modest real gains while international competition becomes ever more harsh.

* * * *

Over the past four decades, government expenditure has risen faster than nominal gross domestic product. In the early postwar years, the ratio was about 20 percent; at the end of the 1980s, it had doubled (see Figure 2.1). Measured in constant dollars, the expenditure-to-GDP ratio went up by somewhat less over the same period — from just over 25 percent to about 43 percent (see Figure 2.2).[1] No matter how it is measured, the rise in the ratio was far from smooth, affected as it was by cyclical fluctuations in GDP and the automatic response of outlays on programs of income support. Nevertheless, the upward trend is clear, with persistent rises in both peaks and troughs.

The aggregate figures conceal differing developments at each level of government and in various kinds of spending. As soon as the data are disaggregated into expenditure by the federal government and expenditure by the provincial, local, and hospital (PLH) sector and into the broad categories of programs, interest, and defense (see Figures 2.1 to 2.3, and Table 2.1), several broad trends stand out:

- Unlike federal spending, PLH-sector spending has risen more rapidly than GDP for most of the past three decades (see Figure 2.4).
- Between 1939 and the mid-1950s, civilian program expenditure by the federal and PLH sectors combined rose gradually and modestly, but federal expenditure displaced some provincial spending when the federal government introduced national unemployment insurance and old age security programs.
- In the postwar decade, the relatively high defense spending associated with the Korean War was responsible for a substantial shift upward in the expenditure ratio. The winding down of the war coincided with the introduction of hospital insurance, leaving the total ratio stable.
- From the mid-1950s to the mid-1970s, total program expenditure rose dramatically as national hospital insurance and medicare and the enhanced welfare system came into being. The

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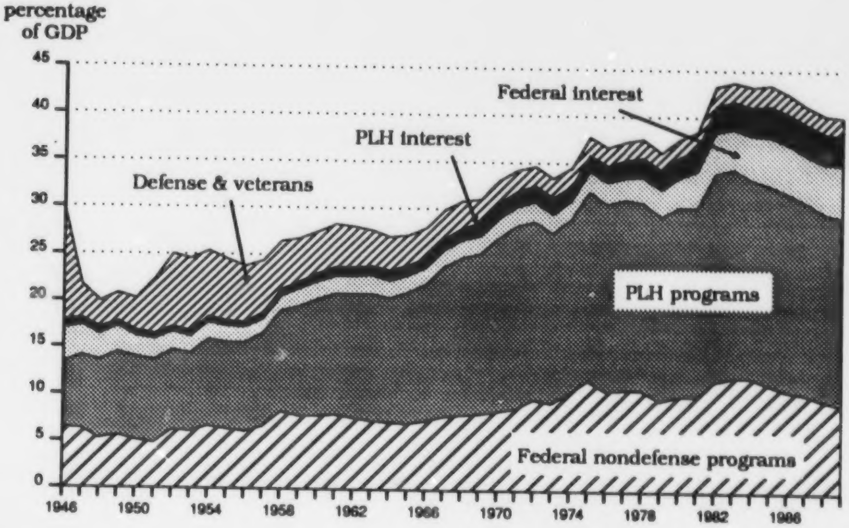
[1] As noted in Chapter 1 and discussed later in this chapter, the discrepancy implies that the real cost of government services has risen.

Figure 2.1: ***Government Expenditure-to-GDP Ratios, 1946–89, in Current Dollars***

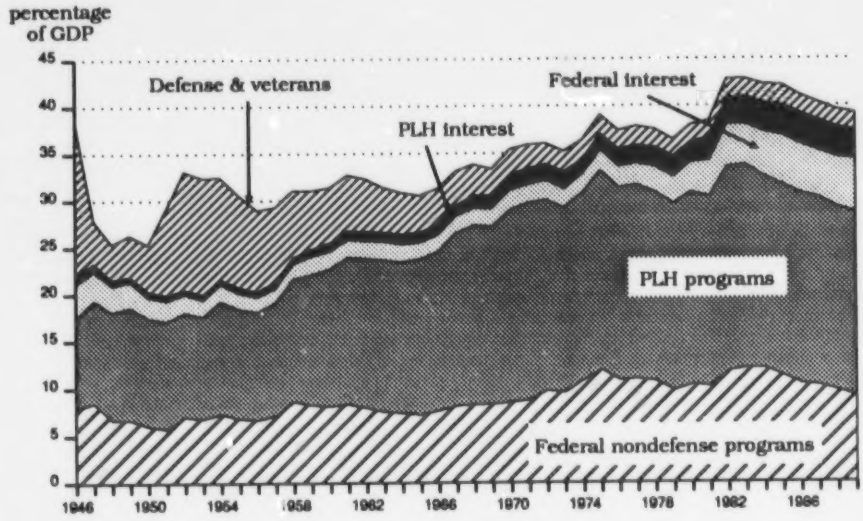


Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

increases show up almost entirely at the PLH level, but the federal government played a major role in these developments by making conditional transfers to the provinces.

- The relationship of total government program spending to GDP at the end of the 1980s differed little from what it had been in the mid-1970s. There was, however, a prolonged period following the 1981–82 recession when the ratio shot up as governments dealt with a number of new, often temporary demands. The augmentation of total program expenditure by these new "needs" added to the overall stress on government finances in the 1980s; the return to the previous ratio came partly from the scaling back of program spending and partly from excellent overall growth of the economy during the expansion of the 1980s.

Figure 2.2: ***Government Expenditure-to-GDP Ratios, 1946–89, in Constant Dollars***

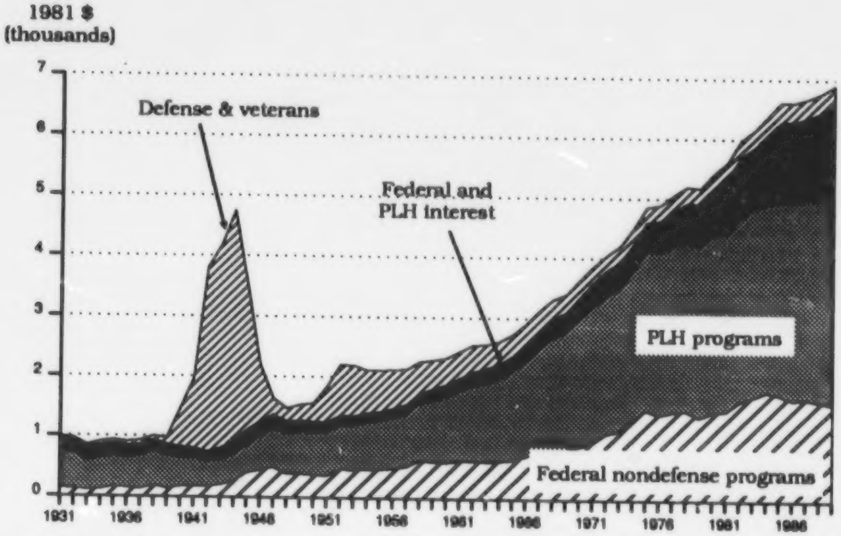


Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

- Many recent discussions about the growth of government have been concerned with the expansion of government activities, and, indeed, program spending in constant dollars per person rose dramatically in the 1980s, especially at the PLH level. Yet that growth was not in program spending as a share of GDP. Since the mid-1970s, the rise has been in the relative cost of programs and in interest payments by the federal and PLH sectors.

This chapter examines these PLH-sector trends in more detail and considers possible explanations for them. In particular, it addresses the question of why real program expenditure has grown at about the same pace as GDP, even though few new programs have been implemented since 1971, and whether the demand for new programs

Figure 2.3: ***Government Expenditure Per Capita, 1931–89, in Constant Dollars***



Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

might be accommodated without total PLH-sector expenditure that rises faster than GDP.

One point seems worth emphasizing. Although this study is concerned with trends in PLH-sector finances, it is clear that they are intimately entwined with developments at the federal level. As the preceding list suggested, once defense and other war-related spending returned to its prewar size relative to the economy, the demand for more social programs shifted the impetus for growth from the federal to the provincial level of government and laid the foundation for the ongoing struggle over revenue. Of course, expenditure — whether in constant dollars per capita or as a ratio to GDP — is only one aspect of the size of government. Nevertheless, the federal system might be more usefully criticized for inefficiency in the delivery of services because of duplication rather than because of the size of its expenditure.

Table 2.1: *Changes in Government Expenditure, 1952–89*

(constant dollars)

	1952–61	1962–71	1972–81	1982–89	1952–89
			(percentage change)		
GDP	3.3	5.4	4.4	3.3	4.1
Population	2.6	1.7	1.2	0.9	1.6
Total expenditure					
Federal government	1.4	3.4	6.4	4.1	4.0
PLH sector	8.9	8.8	4.3	3.3	6.3
Federal and PLH	4.7	6.5	5.1	3.6	5.1
Exhaustive					
Federal government	–1.8	1.2	1.7	2.1	1.0
Federal nondefense	3.7	6.9	3.0	–0.4	3.5
PLH sector	8.4	7.8	3.3	2.6	5.5
Federal and PLH	3.4	5.7	2.9	2.5	3.7
Distributive					
Transfers to persons and business by:					
Federal government	8.2	5.6	8.5	2.4	6.2
PLH sector	11.9	14.0	6.7	3.4	9.0
Federal and PLH	8.9	8.2	7.7	2.8	7.0
Interest on the debt:					
Federal government	5.8	6.0	11.5	8.7	8.2
PLH sector	11.4	11.5	8.2	6.9	9.5
Federal and PLH	7.3	8.1	10.1	8.0	8.5

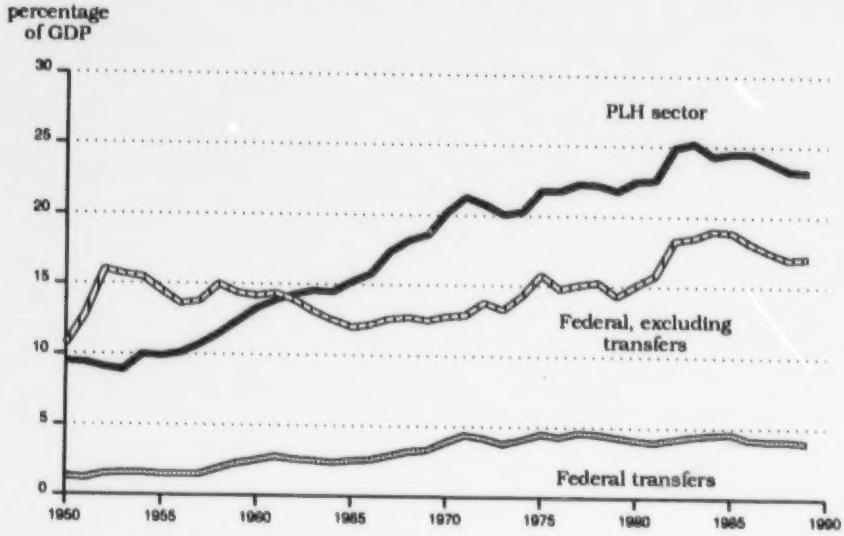
Notes: Transfers have been adjusted to exclude public service superannuation fund transactions covered in the pension plans and payments to hospitals before 1961.

Exhaustive expenditure has been adjusted to exclude capital consumption allowances and to include transfers to hospitals before 1961.

Transfers to persons have been deflated by implicit price deflators for consumption. Transfers to business have been deflated by the GDP implicit price deflator and the nonresidential investment implicit price deflator.

Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

Figure 2.4: ***Government Expenditure as a Percentage of GDP, 1950–89***



Note: Adjusted for public service superannuation funds.

Source: Author's calculations, using from Statistics Canada, *National Income and Expenditure Accounts.*

Some Notes on Economic Analysis

All government spending is not the same. Different kinds of expenditure have different kinds of economic impact, so disaggregation is necessary for useful analysis.

In general, I have used the government spending categories of consumption (current goods and services), capital formation, transfers, and interest payments, which are the basis of the National Income and Expenditure Accounts (NIEA) measurement of the government sector in the System of National Accounts (SNA). The increasing complexity of government operations leads, however, to a need to look beyond these large aggregations. For example, exhaustive expenditure — consumption spending and capital formation — encompasses spending on such varied services as education, health care, and police protection. Unfortunately, as explained in Chapter 1, the NIEA data do not provide sufficient detail for analysis according to such operations. The functional breakdown of the Financial Management System (FMS) series does offer some supplements, but it is provided only in current dollars and it does not separate consumption and capital expenditure. The biggest handicap to making use of the FMS data is availability; consolidated provincial-local revenue and expenditure data are available without a break only from 1975 (the NIEA series starts in 1961).[2] Therefore, I have had to use several data sources and measures in this chapter.[3]

International Comparisons

Neither the level nor the growth of Canada's total public-sector expenditure is particularly remarkable compared with those of a number of other countries of the Organisation for Economic Co-operation and Development (OECD). Using the expenditure-to-GDP ratio as a measure, Canada was in the middle of the pack of 19 OECD countries from 1970 to 1987.

Canada's ratio did, however, rise more than that of six of the countries. One of them was the United States, whose public expenditure relative to GDP grew about half as much as Canada's between 1970 and 1987. Some of the difference in growth can be explained by Canada's introduction of nationalized medicare, the Canada Pension Plan, and the Quebec Pension Plan in the 1960s.

Canada, with its federal system, is sometimes criticized as having too much government. The data, however, show that countries with a federal system of government generally have lower ratios than centralized systems.

The OECD data include the whole of the SNA public sector's transactions — that is, they include transactions of the CPP, QPP, and superannuation funds, which have been omitted from the other data used in this chapter.

Source: Organisation for Economic Co-operation and Development, *Economic Outlook*, June 1990.

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[2] Work is now under way at Statistics Canada to extend the FMS series back to 1960.

[3] Unless otherwise mentioned, all the data in this chapter are taken from the NIEA. Transactions of the Canada Pension Plan (CPP) and Quebec Pension Plan (QPP) have been excluded from both expenditure and revenue; as have employer and employee contributions to and pension payments by the public service superannuation funds (PSSFs).

Another problem arose in considering distributional spending. Any examination of this activity should take into account all measures that affect government expenditure — not only cash transfers but also tax expenditures and the value of differential tax rates. Yet the available data do not permit doing so.[4] In the NIEA, unlike the FMS, even refundable tax credits are netted out from tax revenues; neither series takes account of nonrefundable credits.

Expenditure Developments

Between the mid-1950s and early 1970s, real spending by the PLH sector was moving along in the fast lane while the economy was cruising (see Table 2.2). During the next 20 years, the pace of expenditure growth slackened, following a dramatic decline, and after 1975 frequently fell below the growth of the economy, which also eased. From 1971, however, real exhaustive and distributive spending followed separate trends. In real terms, expenditure on goods and services — both consumption and capital — grew more slowly than GDP, transfers — to persons and to businesses — and interest on public debt grew faster than GDP (see Table 2.1 and Figures 2.5 and 2.6). Of immediate concern in the PLH sector is the way the share of total current-dollar expenditure allocated to fixed capital formation dwindled over the past two decades, while debt interest claimed an increasing share (see Table 2.3).

Trends in PLH versus federal expenditure are influenced by the constitutional allocation of responsibilities in Canada. The PLH sector is responsible for education and health care.[5] Social welfare is a provincial obligation, although the federal government's responsibility for unemployment insurance and old age security creates some overlap. In addition, the PLH sector provides protection of

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[4] On the other hand, some transfers are not intended to be distributive.

[5] "Education" here refers to primary and secondary education. As noted in Chapter 1, government support of colleges and universities is classed in the NIEA as transfers to the private sector. In the FMS functional breakdown, "education" includes all expenditure on it, whether for direct delivery or through transfer. Neither system, however, includes support of education through tax reductions or subsidies of loan interest.

Table 2.2: ***Government Expenditure: An Overall View, 1951–89***
(1981 dollars)

	1951	1961	1971	1981	1989
			(billions of dollars)		
Spending					
Federal	15.2	22.0	30.6	56.2	76.8
PLH	10.5	22.7	52.8	80.4	104.4
Total	25.8	44.6	83.4	136.7	181.2
			(dollars)		
Per capita spending					
Federal	1,086	1,204	1,419	2,309	2,929
PLH	753	1,244	2,446	3,305	3,981
Total	1,839	2,448	3,866	5,614	6,910
			(percent)		
Spending as percentage of GDP					
Federal	17.2	16.0	13.2	15.8	16.7
PLH	11.9	16.8	22.7	22.6	22.6
Total	29.1	32.6	35.9	38.4	39.3

Note: Excludes capital consumption allowances and public service superannuation fund contributions and annuities. Transfers and interest have been deflated by various GDP implicit prices.

Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

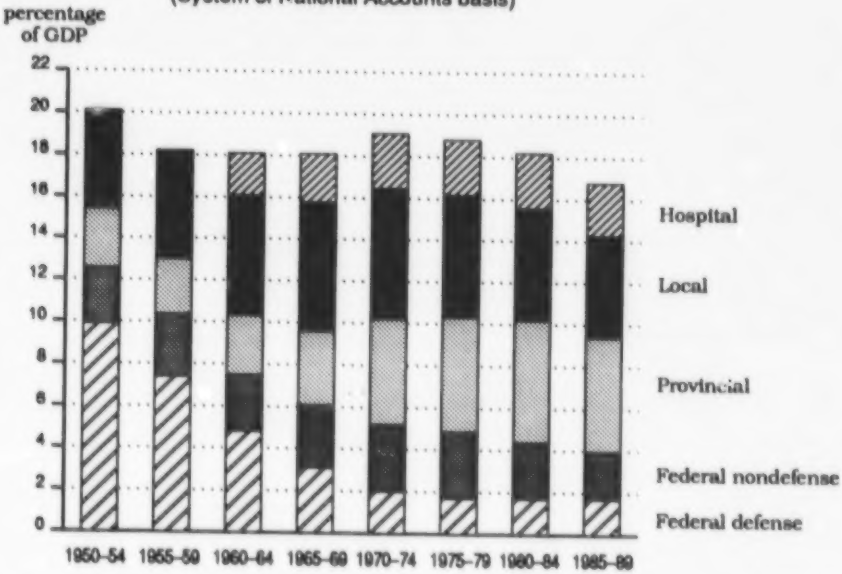
persons and property, some transportation and communications, services for resource conservation and industrial development, regional planning and development, regulation in a variety of areas, general bureaucracy, and traditional municipal services. When considering the separate economic groupings, it is frequently necessary to examine the provincial, local, and hospital sectors separately in order to uncover the distinguishing developments.

Expenditure by Function

Before examining the economic breakdown of the PLH data, it is useful to look at the FMS functional categories (see Table 2.4). It is

Figure 2.5: ***Government Spending on Current Goods and Services, 1950–89***

(System of National Accounts basis)

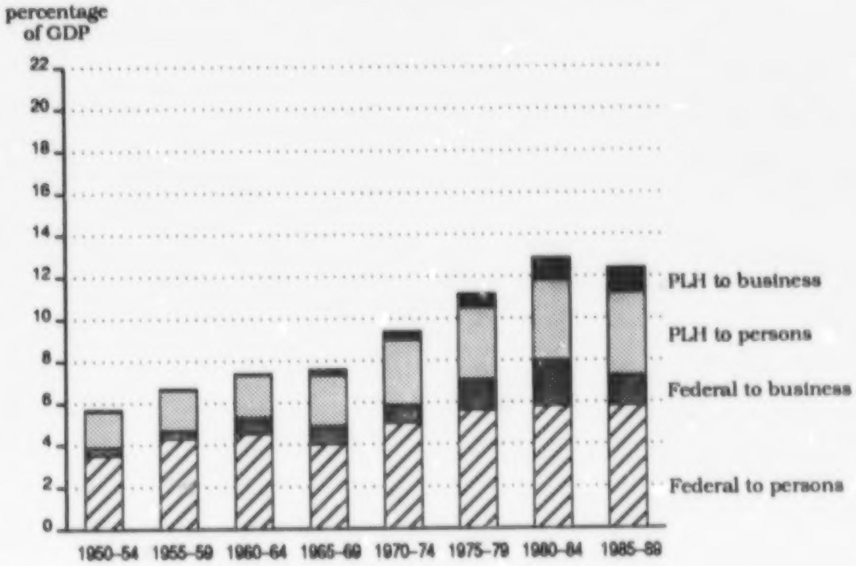


Source: Author's calculations, based on data from Statistics Canada, *National Income and Expenditure Accounts*.

interesting to observe that, although total expenditure was a higher percentage of GDP in 1989 than at any time in the second half of the 1970s, program spending (relative to GDP) was *lower* in 1989 than in most of the 1970s, illustrating the constraint that debt-servicing has exercised since the 1981–82 recession.

Health, education, and social services are the most important expenditure functions; together they accounted for 54 to 56 percent of total spending for the 1975–89 period. These big three PLH-sector functions increased as a group, at about the same pace as GDP from the mid-1970s to the 1981–82 recession and then shifted upward relative to GDP. Health care underwent a major upward shift after 1979, from which it did not retreat, and by 1986 it had replaced education as the area with the largest share of the total. Education fell relative to GDP over the 15 years. Meanwhile, gross interest

Figure 2.6: ***Government Transfers to Persons and Business, 1950–89***
(National Income and Expenditure Accounts basis)



Note: Excludes public service superannuation fund pensions.

Source: Author's calculations, based on data from Statistics Canada, *National Income and Expenditure Accounts*.

charges became an increasing burden, running close to social services in importance by the end of the 1980s.

After the mid-1970s, expenditure on other functions grew more slowly than GDP. The relative size of spending on both general services and protection of persons and property was fairly stable. The ratio for expenditure on transportation and communications declined continuously. Spending on resource conservation and industrial development grew faster than GDP from 1975 to 1982, reflecting the resource boom.[6] Overall, the remaining categories — the environment, recreation and culture, regional planning and

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[6] Expenditure on resources and industrial development is sizable in some provinces. But because it is relatively small in the three largest provinces, it ranged only between 1.0 and 1.7 percent of GDP in the national aggregate during the entire 1975–89 period.

Table 2.3: ***PLH-Sector Expenditure as a Proportion of GDP and Total Expenditure, 1962–89***
(National Income and Expenditure Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(percentage of GDP)			
Current goods and services	9.2	12.3	13.8	14.6	15.5	14.5
Net transfers to persons	1.8	2.9	3.1	3.5	4.0	3.8
Transfers to business	0.2	0.3	0.6	0.8	1.3	1.1
Interest on public debt	1.1	1.4	1.7	2.2	3.1	3.2
Capital formation	3.6	3.3	2.9	2.4	2.2	2.0
Total	*15.9*	*20.2*	*22.1*	*23.5*	*26.0*	*24.6*
			(percentage of total expenditure)			
Current goods and services	57.8	60.4	62.1	61.8	59.3	59.1
Net transfers to persons	11.5	14.5	14.1	14.8	15.2	15.5
Transfers to business	1.2	1.4	2.5	3.6	4.8	4.3
Interest on public debt	6.6	7.1	7.8	9.1	11.8	13.1
Capital formation	22.8	16.3	13.1	10.3	8.4	7.9
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

Note: Public service superannuation fund payments have been excluded from net transfers to persons.

Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

development, and miscellaneous — grew more slowly than GDP during the period, from an average of 2.8 percent of GDP in 1975 to 2.5 percent in 1989.

Expenditure by Economic Category

With the FMS functional data in mind, we can look at PLH-sector expenditure by economic category. Expenditure on current goods

Table 2.4: ***Consolidated Provincial and Local Government Expenditure***
(Financial Management System basis)

	1975–76	**1977–81**	**1982–86**	**1987–89**
		(percentage of GDP)		
General services	1.5	1.7	1.7	1.6
Protection of persons and property	1.4	1.4	1.4	1.4
Transportation and communications	2.4	2.2	2.0	1.7
Health	5.0	4.9	5.7	5.7
Social services	2.8	2.9	3.4	3.4
Education	6.1	5.9	5.8	5.3
Resource conservation and industrial development	1.1	1.2	1.6	1.2
Environment	1.0	0.9	0.8	0.8
Recreation & culture	0.8	0.8	0.8	0.7
Regional planning and development	0.1	0.2	0.2	0.2
Debt charges	1.7	2.1	2.9	3.0
Other expenditure	0.9	0.6	0.8	0.7
Total	*24.9*	*24.9*	*27.2*	*25.8*

Note: Totals may not add up due to rounding.

Source: Author's calculations, using data from Statistics Canada, *Financial Management System* and *National Income and Expenditure Accounts*.

and services — consumption — is by far the largest category at the PLH level, unlike the case at the federal level, and is explored first.

Consumption

In the 1980s, aggregate PLH-sector consumption was more than three times federal consumption. (Even considered separately, provincial governments and local governments *both* had higher consumption levels than did the federal government.) This has not always been the case. In the 1950s, average federal consumption — boosted by Korean War defense spending — was substantially larger than PLH consumption, but in the 1962–71 period the federal average shrank to about half the PLH level (see Table 2.5). Though real federal and PLH consumption spending have been on very

Table 2.5: ***Government Expenditure by Economic Category, 1952–89***
(National Income and Expenditure Accounts basis)

	1952–61	1962–71	1972–81	1982–89	1952–61	1962–71	1972–81	1982–89	1952–89
	(average, 1981 dollars per capita)				*(average percentage change)*				
Capital									
Federal	45	55	61	67	16.4	1.6	–3.1	9.8	6.0
Provincial	89	132	151	149					
Local	105	166	165	181					
Hospital[a]		27	22	32					
PLH	198	325	339	362	7.3	3.6	–0.5	2.6	3.3
Consumption[b]									
Federal	787	577	630	658	–1.3	–0.5	1.0	0.5	–0.1
Provincial	193	340	702	877					
Local	372	574	768	806					
Hospital[a]	65	217	337	407					
PLH	633	1,132	1,807	2,090	5.3	6.6	2.7	1.5	4.2
Transfers[c]									
Federal	316	453	941	1,271	5.5	3.9	7.2	1.5	4.6
PLH[a]	84	232	525	778	9.1	12.1	5.4	2.4	7.4
Interest[c]									
Federal	126	179	340	792	3.2	4.3	10.2	7.7	6.5
PLH	50	118	257	496	8.6	9.6	6.9	5.9	7.8

[a] Statistics Canada began segregating the hospital sector in 1961. Transfers from provinces to hospitals for the years 1955 to 1960 are shown as "hospital consumption" and have been subtracted from "transfers".

[b] Excludes capital consumption allowances.

[c] Deflated by the author, using various GDP implicit price deflators; public service superannuation fund pensions have been excluded from transfers.

Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts.*

different tracks over the past four decades, together they have grown at about the same pace as GDP.

There are a number of links between the demand for private and public consumption. Many of the forces that drive private demand — for example, increases in incomes — also drive public consumption, and many services — education, health care, recreation, and so on — are purchased by both the private and public sectors. Some public spending, such as that on police patrolling, is positively related to private consumption, and some public spending, such as that on medical care, displaces private spending.[7] It is, therefore, useful to relate PLH-sector and private-sector consumption. Consumption by the PLH sector jumped from 16 percent of private consumption in the 1950s to 28 percent in the 1960s; the trend reversed in the past two decades (see Figure 2.7). Provincial spending alone continued strong; in constant dollars per capita, it grew on average at 2.1 percent from 1976 to 1989.

Medicare and other health-care services figure prominently in provincial expenditure. The establishment of a national health-care system in Canada had an enormous impact on PLH-sector consumption in the 1960s, and the health-care function of the sector has the largest share of total spending. But in the economic categories of the NIEA, it is not possible to measure total government expenditures on health care. The national health system is, broadly speaking, divided into two separate programs: hospital care and medicare — the services of doctors, laboratories, and so on. As a group of self-governing para-public institutions, the hospitals are a separate sector in the NIEA,[8] but medicare expenditure is lumped in with other provincial expenditure on current goods and services (consumption). The hospital sector is straightforward and uncomplicated, and so I turn to it first.

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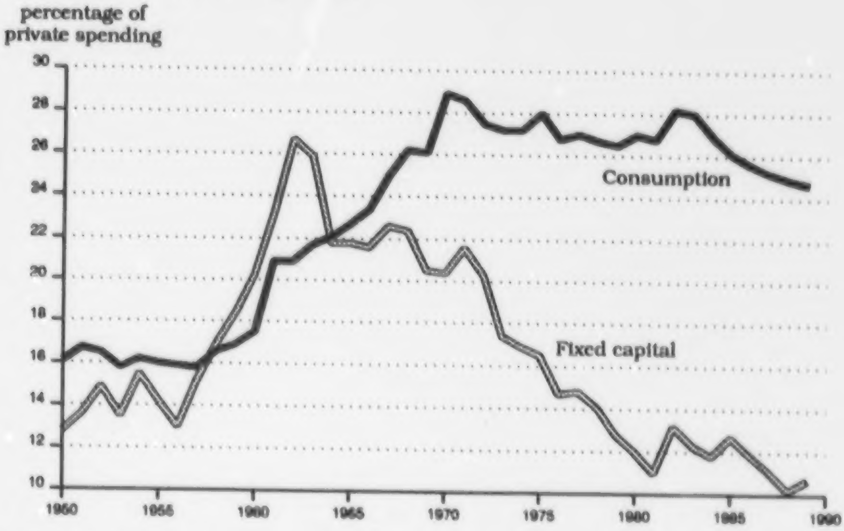
[7] Richard A. Musgrave, *Fiscal Systems* (New Haven: Yale University Press, 1969), pp. 76–80.

[8] The NIEA has segregated a hospital sector since 1961. It is funded almost entirely by provincial government transfers, part of which are, in turn, transfers from the federal government.

Figure 2.7: ***PLH-Sector Capital and Consumption Spending, 1950–89***
(in constant dollars)



Note: Excludes capital consumption allowances.

Source: Author's calculations, based on data from Statistics Canada, *National Income and Expenditure Accounts.*

Hospitals. Hospital expenditure is now more than 50 percent of total government health-care spending. (To grasp the remarkable size of the hospital sector, consider that it is now more than half the size of the local government sector, which makes almost all the current expenditure for elementary and secondary education.) All the provinces had hospital insurance and diagnostic service plans in effect by 1959. After an initial decade of expansion, the real spending of the hospital sector grew at about the same pace as real GDP (see Figure 2.5). In terms of constant dollars per capita, therefore, hospital consumption rose strongly for nearly the whole of the past three decades. Average spending in the 1980s was twice the level of that of the first decade of operation of the national hospital insurance and diagnostic program (see Table 2.5).

Provincial Governments. Provincial government consumption spending is dominated by direct purchases of medical and other nonhospital health-care services, the protection of persons and property, and the cost of the bureaucracy. (The last category includes some of the costs of the regulatory role of provincial governments.) As shown in Figure 2.8, the time of major growth in provincial spending was the period when the national medicare plan came into effect. (The last province, New Brunswick, joined in 1971.)[9] Thus, much of the increase in provincial government spending relative to private consumption can be accounted for by the introduction of national medicare.[10]

During the following decade or so, the provinces introduced further medicare spending, although all the innovations were minor relative to the developments of the 1960s. Most jurisdictions extended medicare to such services as chiropractic and optometry during the 1970s. In 1977, extended health and home care was introduced. Another source of growth in government expenditure at the expense of private outlays began in 1974 with the introduction of Ontario's Drug Benefit Plan and British Columbia's Pharmacare. Most of the other provinces followed with similar plans in the late 1970s and early 1980s.

Collectively these measures may have equaled 1 percent of private consumption. Yet the overall rise in the ratio of provincial to private consumption was from 10 to 11 percent during the decade to 1981. The implication is that the provinces' remaining expenditure on goods and services — basic medicare, police, the bureaucracy, and so on — kept up with private consumption. Much of the reversal in the ratio after 1982 may simply be explained by the buoyant expansion of consumer spending.

Another way of looking at provincial spending patterns is to use constant dollars per capita as a measure. Given the limited number

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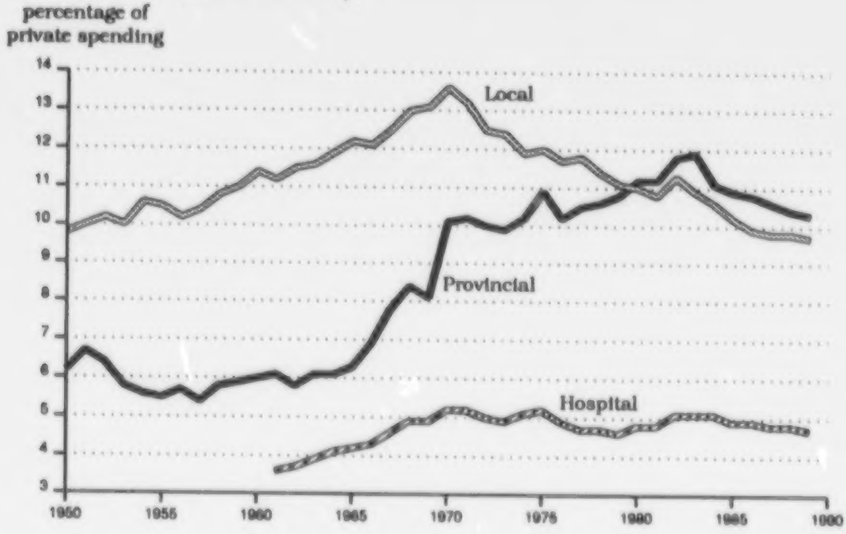
[9] The Yukon did not join until 1972, but the costs for its relatively few residents were so small that they do not show up in the figure.

[10] Since there are no separate data in the NIEA for medicare expenditures and FMS data are in current dollars only, one must rely on this sort of indirect reasoning when working with real figures.

Figure 2.8: ***Consumption Spending by the Provincial, Local, and Hospital Sectors, 1950–89***
(in constant dollars)



Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

of programs at the provincial level that require direct purchases, one might have expected per capita real expenditure to have been only moderately larger in the 1980s than in the 1970s. In fact, it averaged 25 percent more in the 1982–89 period than in the preceding decade (see Table 2.5), although few new programs surfaced after the 1981–82 recession. The implication is that the large rise resulted from spending on medicare, on government administration, or both. Certainly the available data indicate strong growth in overall health-care expenditure by the provincial sector.[11] The real cost of the bureaucracy, on the other hand, does not appear to have escalated faster than the real economy. From the mid-1970s to the late 1980s, many provincial governments tried to increase productivity in the public sector by restraining the growth of the civil service. Although their success was mixed, the cost of general government in current dollars rose at about the same rate as GDP. That provincial government purchases of current goods and services grew faster than those of the private sector throughout the 1970s and failed to slow down more during the expansion of the 1980s seems likely, therefore, to stem from the explosion in health-care spending. If the public's demand for health care was to be satisfied without putting undue pressure on provincial financing, perhaps the other areas should have been restrained more than they were.

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[11] The FMS measure of health expenditure rose faster than GDP between 1980 and 1983 largely because of the very poor growth of the economy in 1980 and the recession in 1981–82. GDP performance cannot, however, explain the fact that the average of the ratio in 1987–89 was no lower than the 1982–86 average.

Local Governments. At the local level, expenditure on current goods and services relative to private consumption rose in the 1950s and 1960s and fell in the next two decades (see Figure 2.8). The FMS data show that spending in current dollars on general services, on protection of persons and property, on transportation and communications, and on sanitation and water treatment was a smaller per - centage of private consumption in 1989 than in 1975. Yet these responsibilities accounted for only about a third of local expenditure in the late 1980s, while spending on education alone was 40 percent.[12]

Local education expenditure, which comprises primary and secondary school board outlays, rose rapidly relative to private consumption through the 1960s, reaching almost 8 percent by 1970. By the end of the 1980s, however, it had declined to less than 6 percent. This pattern presents a puzzle. Most of the primary and secondary educational structure was already in place by the 1950s, so one would not expect this type of consumption to have increased faster than private consumption during any of the following decades. It is true that new educational needs continued to emerge: kindergarten and prekindergarten were added throughout most of the country; program offerings were expanded to include more remedial, second-language, and technical instruction; schools were centralized, entailing more busing of students. Nevertheless, these increased needs could be — and were — dealt with gradually over four decades. The primary factor in the sharp rise and fall of the ratio is likely to have been demographic developments, which will be examined later.

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[12] My calculations from FMS data.

Summary. These developments, as well as the decline in importance of defense expenditures at the federal level, left the PLH sector with a much greater share of consumption expenditure than the federal sector. As a user of resources, the PLH sector now has a much greater direct effect on the economy than the federal government. Its exhaustive expenditure accounted for 78 percent of total government spending on goods and services in 1989, and claimed 15.6 percent of real GDP on average in the second half of the 1980s, compared with 7.0 percent in the first half of the 1950s. The ratio of the late 1980s was, however, down from the highs of the 1970s. During the 1982–89 period, the PLH sector's average aggregate real consumption per capita rose by 16 percent from the average of the preceding decade; this increase reflected a very modest gain at the local level (almost entirely from education), which diluted large gains by the other two PLH sectors, particularly the provincial.

Fixed Capital Formation

It is useful to examine the trend in public capital formation relative to private capital formation, for there is a great deal of interdependence between the two. First, private investment will be discouraged if such public infrastructure as highways, water and sewage systems, public transit, and so on is lacking or run down. Second, because Canada has a mixed, rather than a socialist, economy, and is now at an advanced industrial stage with a well-developed public infrastructure, it is not surprising that the level of public-sector spending on fixed capital relative to comparable private spending is now fairly small, having declined substantially since the 1950s. However, growing urbanization, environmental concerns, and competitive pressures from freer trade all suggest that the PLH sector may have to invest substantially more in fixed capital during the 1990s than it did in the past decade or so. The public-private ratio may stabilize, but that outcome is not truly predictable.[13] Third, the ratio is of interest in regard to fiscal stabilization, since increased spending on capital projects has been a popular way for governments to make up for the decline in private investment and other expenditure that usually takes place in a recession.

Figure 2.7 traces public capital formation at the PLH level, and Figure 2.9 shows the sectoral breakdown. In response to the baby boom and high levels of immigration, the increase in the demand for public-sector investment in the 1950s and 1960s was intense. These years, therefore, were a time of major expansion of schools, highways, land development, and public transit. These areas were almost entirely the responsibility of the PLH sector, which accounts for the bulge in the PLH-to-private investment ratio between the mid-1950s and mid-1960s. (The swings in the ratio during this time were the result of a combination of very weak private nonresidential investment, the stabilization role of public-sector capital spending, and the federal political agenda.)

The fact that most of the country's public-sector capital needs fell into the domain of the provinces did not preclude the federal government from getting into the act. Having retained most of its wartime power of levying taxes, the federal government was able to make grants to the provinces to stimulate investment. Thus, much of the PLH sector's infrastructure was put in place in these decades with the aid of federal grants. (Even for a national project such as the construction of the TransCanada Highway, which spanned these two decades, the federal role was confined to the transfer of funds to the provincial governments.) The powerful federal influence can be seen in the fact that the municipal projects undertaken with the aid

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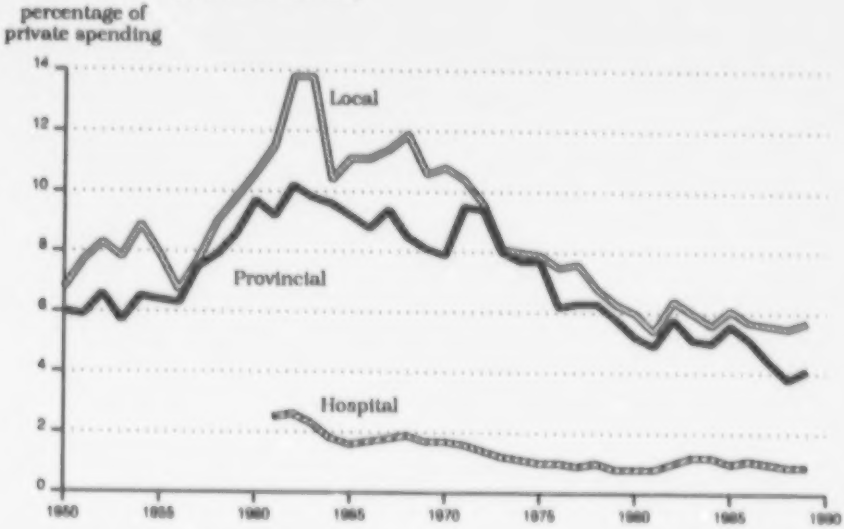
[13] Richard M. Bird, *The Growth of Government Spending in Canada* (Toronto: Canadian Tax Foundation, 1970), pp.142-143.

Figure 2.9: ***Fixed Capital Spending by the Provincial, Local, and Hospital Sectors, 1950–89***
(in constant dollars)



Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

of grants to combat seasonal unemployment amounted to more than a third of local government capital spending in the early 1960s. The federal government was concerned about the rising unemployment rate, and the municipal infrastructure needs of the exploding population justified the cash transfers.

The period of,the mid-1960s to the present has been a sharp contrast. By and large, provincial and local governments have not engaged in continuous, intensive infrastructure replacement or expansion. By 1989, the ratio of PLH to private capital investment had fallen to 10 percent, the lowest level in 40 years. Evidence of general negligence in the maintenance and development of roads, highways, transit, and water- and sewage-treatment plants began to emerge in a number of jurisdictions in the late 1970s. For example, Quebec described its own foot-dragging in water purification as "tragic."[14] Other provinces and municipalities also began to attend to the problem of aging infrastructure, yet many still have to come to grips with these needs. Meanwhile, pressures for spending on transportation and communication are growing.

In some instances, necessary PLH-sector capital investment was undertaken only in conjunction with high-profile, special projects. For example, the Canadian centennial was a stimulus for a number of such undertakings across the country, particularly in Montreal, which hosted Expo '67. Similarly, such events as the 1976 Summer Olympic Games in Montreal, the 1988 Winter Olympic Games in Calgary, and Expo '86 in Vancouver became reasons for otherwise necessary construction. Yet such projects are rarely subject to rigorous cost-benefit analysis, and the increased debt load they entail can be detrimental to the long-run maintenance of essential plant and to carefully thought-out overall investment.

At the federal level, capital investment is of minor concern and, in most cases, postponable without serious consequences. At the PLH level, however, delays can be a major handicap to private-sector activity. Provincial and local governments need to work together on long-term plans for such investment and to make a commitment to keep to them. Much of this infrastructure is the responsibility of local governments and may be financed by borrowed funds. Provincial governments, however, usually have to assist with the financing of projects such as water and sewage systems, which cannot be neglected for long without severe consequences, and mass transit systems, which can become prohibitively expensive for municipal governments if delayed for too long.

It is difficult to predict the trend in PLH-sector capital investment relative to private investment in the 1990s. The ratio may well rise as governments scramble to make up for the delays of the past two decades. Yet the private sector, responding to the decline in entrants to the labor force and intense international competition, is also likely to be vigorously increasing its investment expenditure.

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[14] By the end of the 1970s, Quebec had to increase its expenditure in the area so much that in 1980 it set up a special government corporation, La Société québécoise d'assainissement des eaux, to manage it. Quebec Budgets 1977-78, p. 42; and 1980-81, p. 30.

Transfers to Persons and Business[15]

Between the early 1950s and the second half of the 1970s, the share of all government transfers in Canada's GDP doubled, from 5.7 percent to 11.3 percent (see Figure 2.6). After rising even further in 1982 and 1983 — mostly because of subsidies to oil producers and importers and the Petroleum Incentive Program (PIP) — the ratio fell back to 11.4 percent by 1989.

International Comparisons: Transfer Spending

Compared with the other major OECD countries, Canada was in the center of the range of growth in distributive expenditure relative to GDP between 1970 and the mid-1980s. In most of these countries, transfers to persons and subsidies to business grew faster than final expenditure on goods and services. Three countries with the fastest growth in transfers and subsidies between 1970 and 1985 — the Netherlands, France, and Sweden — also had the highest ratio of that expenditure to GDP in 1985. Sweden and the Netherlands also had the highest ratio of total expenditure to GDP.*

* This analysis is covered briefly by Nouriel Roubini and Jeffrey Sachs, "Government Spending and Budget Deficits in the Industrial Countries," *Economic Policy* (April 1989): 100-132.

The federal-PLH split in transfer spending is interesting. Even though social welfare is a provincial responsibility, constitutional and other developments in federal-provincial fiscal responsibilities have left Ottawa with a burden of income support greater than that of the provinces. It is responsible for such high cost programs as old age security and unemployment insurance, and consequently it directly paid 54 percent of the total transfers to persons and business in 1989. In addition, the federal government shares part of the cost of some transfers made by provincial and local governments, particularly those for general welfare assistance and other welfare-related aid through the Canada Assistance Plan (CAP) and for postsecondary education funding through Established Programs Financing (EPF).

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[15] As already noted, there are no adequate data on tax expenditures that act as transfers. This section is, therefore, confined to the role of direct expenditure in income distribution.

The federal share of PLH transfers to persons and business (NIEA measure) was about 24 percent at the end of the 1980s.

Over the 1952–89 period, the average increases in transfers made by the PLH sector were almost 50 percent larger than those made by the federal government and far more volatile. In the 1982–89 period, however, the average increases at the PLH level were similar to the average increases in real GDP and only slightly higher than those at the federal level (see Table 2.1).

As in the case of exhaustive expenditure, the aggregate data on transfers conceal a variety of historical developments. Some of the major categories of provincial and local transfers (see Table 2.6) are examined below.

Transfers to Persons. Transfers to persons at the PLH level cover such diverse areas as insurance for work-related disabilities, day care, and assistance to the unemployable. Roughly half of the transfers to persons by provincial and local governments can be described as income-support programs, and, unlike those at the federal level, most are targeted at people below the poverty line. It is particularly difficult, however, to discern trends in social-welfare transfers because governments transfer resources to people in many ways that are not captured in the SNA measures. Both provincial and local governments provide a variety of merit goods. Many provinces also use the personal income tax (PIT) system to redistribute income, employing tax credits, low-income tax reductions, and flat-rate income taxes. Quebec, with an income tax system separate from the federal one, is particularly able to exploit its PIT for this purpose.

Moreover, interpretation is handicapped when it is not entirely clear whether the goal of the tax-transfer system is to reduce disparity in after-tax income or to provide a minimum standard of living. The latter seems to predominate, at least at the PLH level in Canada. Despite frequent statements about redistributing income from richer to poorer citizens, governments in most capitalist coun-

Table 2.6: ***Major Categories of Provincial and Local Government Transfers***

(identified in the National Income and Expenditure Accounts)

	1989	1974–78 Average	1989
	($ billions)	*(percentage of GDP)*	
General welfare assistance	8.0	0.7	0.9
Workers' compensation board benefits[a]	3.4	0.3	0.5
Grants to postsecondary educational institutions	5.7	1.0	0.9
Grants to benevolent associations	5.0	0.6	0.8
Subsidies and capital assistance to business	6.6	0.6	1.0

[a] Workers' compensation boards are provincial agencies and the payments are, therefore, not included in public accounts expenditure although they are included in System of National Accounts measures of transfers to persons by provincial governments.

Source: Statistics Canada, *National Income and Expenditure Accounts*; author's calculations.

tries have developed highly complex sets of taxes and transfers that are not clearly progressive. Canada's federal system makes it particularly difficult to measure progressivity, let alone to reduce after-tax income inequality.[16]

Welfare Assistance. The most important income-support program at the PLH level is general welfare assistance (GWA). Because it aims to provide a minimum standard of living, expenditure on it should fall as a proportion of total income as per capita income rises. Moreover, a rising level of per capita income in itself should reduce the number of families whose income falls below provincial minimum standards, further reducing the transfer share in total income. A rise in the unemployment rate, however, is likely to result in an increase in unemployment insurance exhaustees and, therefore, welfare claimants. In fact, the 0.29 percentage point rise in the GWA-to-GDP ratio from 1982 to 1985 was related to the 4.3 percentage point increase in the unemployment rate from 1982 to 1983. The much smaller fall in the ratio from 1985 to 1989 — just one-tenth of 1 percentage point — while the unemployment rate dropped from 11.8 percent in 1983 to 7.8 percent in 1988 suggests, however, the emergence of a structural problem in the welfare system.

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[16] Irwin Gillespie concluded in 1978 that federal budgetary policies during the 1970s had "not improved the economic position of the poor relative to the highest-income families." W. Irwin Gillespie, *In Search of Robin Hood: The Effect of Federal Budgetary Policies during the 1970s on the Distribution of Income in Canada* (Montreal: Canadian Economic Policy Committee, C.D. Howe Research Institute, 1978), p. 24.

Workers' Compensation. The total workers' compensation payout grew relative to GDP between 1974 and 1987, with most of the rise coming after 1981. It is difficult to know why. In theory, average benefits should be positively correlated with per capita incomes, but they may not rise as fast because not all provinces have automatic indexation of benefits. A more important influence on payments may be an increase in occupational hazards as well as the apparent rise in the types of disabilities judged to be work-related.

The slight fall in the ratio in 1988 and 1989 may not be a change in the trend, since it stabilized twice before for brief periods. What is clear is that a rise in benefits paid brings a faster rise in the payroll taxes that finance them. Since a number of the boards still have not adjusted program operations in order to fund them fully, the upward trend in benefits is of concern with regard to Canada's future competitiveness.

Postsecondary Education. The ratio between grants to post- secondary educational institutions and GDP declined from 1.1 percent in the early 1970s to 0.9 percent in the late 1980s. Being transfers, these grants do redistribute income, although the stated rationale for the expenditure is the social benefits from a better-educated population.[17]

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[17] Equality of opportunity can be increased by making further education or training accessible to all, but the present system of financing postsecondary education appears to do more to redistribute income from lower-income to higher-income people. See Thomas J. Courchene, "Social Policy," in Thomas E. Kierans, ed., *Getting It Right*, Policy Review and Outlook, 1990 (Toronto: C.D. Howe Institute, 1990), p. 85.

Postsecondary education is primarily an investment in human capital and, as such, can be expected to yield a return in terms of higher per capita income. As a society reaches an advanced stage of development, the private returns probably exceed the social returns and the ratio of this category of redistributional spending to GDP might, therefore, be expected to decline. Canadian governments have, however, made no effort to limit the subsidy to the proportion that yields a social return. For many years, increases in university fees did not even keep up with the rate of inflation. It is not surprising, therefore, that there was only a small decline in grants to postsecondary institutions relative to GDP over the 1970s and 1980s.[18]

Transfers to Business. Subsidies to business by provincial and local governments rose from only half the federal level on average in the 1970s to the same size — $5.8 billion — in 1989. Both as a share of total PLH-sector expenditure and as a share of GDP, local subsidies increased steadily from 1970 to 1986, after which they underwent a modest decline.[19]

Expenditure for capital assistance is much smaller than subsidies at both levels of government. With the phasing out of PIP payments, the federal total shrank from $3.6 billion in 1983 to $1.7 billion in 1989. The provincial figure was about $750 million — down from $1.1 billion in 1983 — but on average the assistance of the late 1980s was much higher relative to GDP than in the late 1970s.

A number of subsidies at the provincial level are related to resources and industrial development. Such programs play an important role in provinces with resource-based economies; they also take up a relatively large share of expenditure in the small provinces. Payments can be quite volatile, being heavily influenced by the health of the respective resource sectors. The governments of the resource-based provinces have a high propensity to provide financial aid to specific industries — oil and gas and the fisheries, for example — in difficult times. The appropriate policy is for governments to share in the insurance of the risk, but only to the extent that it meets a well-defined national objective. In the case of farmers, all should be included in a general income-support program.

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[18] If the value of tax credits for students, student-loan subsidies, and so on were included in the expenditure figures, the ratio might well have risen.

[19] As well, Ontario, Quebec, and Alberta are able to influence the corporate sector's income distribution through their separate corporate income taxes (CITs).

Summary. To sum up, growth in PLH-sector redistribution to persons and business outpaced growth of exhaustive expenditure in real terms during the past two decades. Thus, constant-dollar transfers in the 1980s averaged about 30 percent more than consumption and capital spending combined, compared with 25 percent in the decade before. As a percentage of GDP in current dollars, PLH transfers rose from 3.7 percent in the late 1960s to 5.7 percent in the late 1980s. Even though the federal government was paying out huge amounts for unemployment insurance, old age security, agricultural subsidies, and so on between 1982 and 1989, the PLH sector's transfer payments were almost two-thirds of the federal government's. These developments highlight the growing role of the PLH sector in redistribution of income, a role that had been increasingly turned over to the federal government for the 20 years following the Depression. They also indicate a growing source of pressure on PLH expenditures during the 1990s.

Interest Payments

A second form of income distribution is servicing of the government debt. The PLH sector's gross interest payments more than tripled in constant-dollar terms between the first half of the 1970s and the end of the 1980s. As a percentage of GDP, they rose from 1.6 in the early 1970s to an average of 3.2 in the postrecession 1980s; as a share of total PLH-sector expenditure, they increased from 8.0 percent to 13.5 percent over the same period. (In no province were gross interest payments less than 11 percent of total expenditure over the 1987–89 period.) The increase relative to GDP was also substantial, if not as dramatic as the federal government's (see Figures 2.1 and 2.2).[20]

No useful model of supply or demand factors underlies these developments. They result from political decisions to allow deficits to arise in good times as well as bad and from public acceptance of deficit financing, rather than cyclically balanced budgets, as responsible fiscal policy.

The Growth of Government

Why does the cost of government keep rising throughout the industrialized world? Will real public expenditure continue to grow indefinitely? People have been thinking about these questions for more than a century, examining and analyzing trends and trying to construct models.[21] Determinants of expenditure growth identified in the literature include economic, political, sociological, and even psychological factors. Yet no one has been able to devise a simple theory that is generally accepted.

Some Analytical Underpinnings

This failure does not mean that nothing useful has come out of the hypotheses that have been put forward. The economies of industrial countries are extremely complex, and it would be surprising if their governments' activities were straightforward. This is particularly true in a federation, where an additional layer of government operates fairly autonomously in a number of jurisdictions.

Wagner's Law

The father of the economic theories of expenditure growth was Adolph Wagner, a 19th-century German economist. In his law of the

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[20] The figures here are, however, calculated with gross interest payments. The measure somewhat overstates their importance since there are offsetting interest receipts.

[21] For a review of major theories, see Bird, *The Growth of Government Spending*.

"expanding scale of state activity", he suggested that rising per capita incomes caused by an increase in capital investment will be accompanied by an expanding role of government in the economy — that is, the public sector will provide ever-greater quantities of administration and regulation, public protection, social welfare, recreational facilities, and so on.

Unfortunately, Wagner provided no clear causal link, only some kind of immutable force. Do increasing per capita incomes encourage government to spend more because tax revenue rises or because they stimulate demand for public provision of goods and services? A "law" that is more descriptive than analytical belongs more to biology than to economics. Furthermore, Wagner had never seen a postindustrial society and there is certainly no evidence that growing per capita incomes are inevitably accompanied by a rising proportion of real government expenditure to GDP in countries that are in this advanced stage of development. Indeed, such is not the case in modern Canada. Thus, Wagner's law does not have even descriptive interest for this study.

A Stages-of-Development Framework

A more modern approach to government expenditure growth is to analyze it according to various stages of economic development — preindustrial, early industrial, maturing industrial, postindustrial (see the box on the following page). The first stage is not relevant to the years under review in Canada and is, therefore, omitted.[22]

Is such a framework relevant to the Canadian experience? Superficially, yes. It seems reasonable to place Canada in the latter part of stage two during the postwar years to the early 1970s, which is when the public sector moved to provide more funding for social services, postsecondary education, and the bulk of health needs. These activities are largely provincial responsibilities, and those are precisely the years when real PLH-sector expenditure exploded. In

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[22] See ibid., pp. 82–83.

A Stages-of-Development Framework for the Analysis of Growth in Public Expenditure

Stage One: Early Industrialization. Per capita incomes increase fairly rapidly from a relatively low base. As they increase, the proportion spent on basic needs — both private and social — declines. Since the demand for private goods and services is likely to be satisfied before the demand for social services, such as publicly funded health care, advanced education, and recreation, public program spending is unlikely to rise faster than private spending.

Stage Two: Maturing Industrialization. Per capita incomes have reached a level high enough to enable the society to attend to secondary social needs, such as expanded education, social welfare, and health care. Since an enlargement of government activities in these areas involves a transfer of responsibilities to the public sector from the private sector, public expenditures will likely increase faster than national income.

Stage Three: Postindustrialization or the Information-Intensive Society. Increasing affluence leads to a demand for more government services to complement private expenditure on leisure goods and activities. An increase in commercial activity and the complexity of economic organization lead to a demand for government to expand its regulatory role. Greater urbanization requires more intensive traffic patrols and measures to counteract pollution. Musgrave calls these activities "remedial" and notes that since the private sector is likely to increase its absolute spending on them, there is now no clear case for a rising share of public expenditure.

Source: Richard A. Musgrave, *Fiscal Systems* (New Haven, Conn.: Yale University Press, 1969), p. 79.

contrast, the kinds of government expansion that have been undertaken in the 1980s and that might be anticipated for the 1990s and beyond are almost exclusively those that are associated with increasing affluence and complexity of social and economic organization: child care, care of the elderly, activities to protect the environment, quality-of-life health care, and ever-increasing (if changing) government regulation — all stage-three activities.

Does the stages-of-development framework continue to apply when expenditure is examined by categories? Consumption spending seems to have fit the pattern overall, although there are some anomalies. Health-care spending performed more or less as would be expected; there was a massive switch from private to public expenditure between 1960 and 1971, when the economy was undergoing very buoyant growth. (That health-care spending has continued to grow somewhat may not be a surprise, given the importance people attach to it.) Many other kinds of provincial and local government spending — on protection of persons and property, on water treatment and garbage collection, even on bureaucracy — seem to have followed expectations. The exception is expenditure on primary and secondary education: both its rise and its fall between 1950 and 1988 were sharper than such a simple analytical tool can explain. (Demographic changes seem likely to have been the key factor, as already noted.)

Capital formation certainly fits the stages-of-growth framework in the two decades following the war; public spending in this category soared as infrastructure was put in place. The falloff after 1965 was somewhat more drastic than would be expected, but the reason may have been the failure of provincial and local governments to accept their responsibility for upkeep and expansion. (That hypothesis gets some support from the fact that so much capital spending in the 1970s and 1980s was driven by public demand, either to celebrate special occasions or to provide service once the cracks started to show in the infrastructure.)

Transfer spending for social welfare is particularly difficult to interpret with a stages-of-development approach. First, although the demand for income-support programs may increase with rising per capita incomes, the size of the transfers is likely to be negatively correlated with a measure of average affluence. Second, Canadian governments also transfer resources to the disadvantaged through alternative measures — merit goods and the tax system — that do not turn up in the transfer accounts.

In contrast, transfers for postsecondary education show up clearly in the data. Stage-of-development considerations suggest that such grants will rise faster than GDP during stage two as the government sector seeks to increase the investment in human capital faster than the private-sector is willing to do, which is exactly what happened in the 1950s and 1960s.[23] In stage three, the increasingly affluent society, which has rising expectations of quality of life, can be expected to increase its demand for higher education for its own sake, not only for an increase in expected income. The private-sector share in the expenditure could rise. Given the structure of Canada's financing of postsecondary education, the minuteness of the decline in grants to postsecondary institutions relative to GDP since 1975 fits the prediction.

Ratchet Models of Expenditure Growth

Another model of growth in public expenditure — variously described as a displacement or threshold effect — was developed about 30 years ago. It explains a lasting rise in total government expenditure as resulting from some unusual occurrence that evokes enough sympathy (or outrage) from voters to overcome their resistance to a tax increase. Once the emergency is resolved, the extra funds are still available, and the government finds desirable ways to spend them. Eventually another set of special circumstances arises, and spending jumps up again.

This ratchet model may be expanded into two versions, one of which has some support in the Canadian experience. In the first formulation, the precipitating incident is a calamity such as a war or a major social disturbance. Voters agree that the gravity of the situation merits higher taxes. When the catastrophe is over, the "threshold of tax resistance" has shifted to a new height, enabling new civilian expenditures to displace the defense or other extraordinary expenditure.[24]

There is little Canadian evidence of such an effect from major disruptions. In the two years after World War II, government expenditure resumed its prewar trend.[25] After the 1981–82 recession, program expenditure relative to GDP, which had risen for the duration of the downturn and recovery, returned to the prerecession level.[26] The weakness in the catastrophe hypothesis is the fact that the demands on the public sector from a major disaster or recession do not permit governments to rely on tax increases to any great extent. They must, rather, increase their debt, which later becomes a constraint on the prolongation of the higher rate of program spending.

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[23] Musgrave, *Fiscal Systems*, p. 78.

[24] Ibid. p. 90.

It seems to me, however, that one can construct a less drastic version of the ratchet theory that does have some support in the Canadian experience of the 1950s and the 1980s. Call it the less-than-catastrophic model. Suppose there is a crisis that is protracted and urgent but not calamitous — something considerably less dramatic than a world war — while the economy on average is expanding. The emergency enables governments to push the revenue-to-GDP ratio to a new peak. As the spending demands of the crisis are phased out, the tax ratio may drift down, but the peak already achieved now exerts an influence on the perceived tolerable level of expenditure. New programs begin to backfill the vacated space and, eventually, the peak tax ratio is reachieved.

A Canadian example is the Korean War emergency. Defense spending rose and fell less spectacularly than during World War II, and it was financed only by tax increases, rather than primarily by debt. As that defense-related spending was phased down, civilian program expenditure rose,[27] whether measured in constant dollars per capita or in current dollars as a percentage of GDP. There was no increase in the constant-dollar ratio of total government spending and only a small increase in the current-dollar ratio. Thus, the cost of the national hospital insurance plan and the expansion of other social spending at the end of the 1950s appear to have displaced the Korean War spending.

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[25] In reviewing the catastrophe hypothesis, Richard Bird notes: "The Canadian pattern suggests more strongly that there was no permanent or long-term effect on public spending as a result of World War II than it does to the contrary." Bird, *The Growth of Government Spending*, p. 112.

[26] The adjustment was, however, extremely slow, failing to make room for strong private-sector demand. Moreover, real program expenditure per capita by government remained at the new higher level for the rest of the 1980s, suggesting that it may not be appropriate to put this disruption into the same category as the war.

[27] Expenditure here is federal and PLH-sector combined. Defense spending includes all transfers to veterans.

When the 1981–82 recession was on center stage, a less dramatic but potentially more tragic story was being played out in the background. Since the mid-1970s, interest on the debt had been rising by any measure. The effects of the recession and the slow return to "normalcy" caused the debt-service burden to shift up substantially in the 1980s. As a result, total expenditure as a proportion of GDP had not returned to prerecession levels by the end of the decade. If the tax ratio is raised to a new peak to deal with this latest protracted crisis, will new "needs" then arise, backfilling the gap left by the gradual reduction of the burden of interest payments?

Conclusion

Both the stages-of-development analytical framework and the less-than-catastrophic version of the ratchet model find some support in the Canadian experience. Yet they also suggest a warning and some puzzles — especially for a federal country.

In order to reduce the entire public sector's deficit that has been swollen by interest payments at both the federal and provincial levels, governments need to tackle program expenditure, rather than keep turning to tax increases, which are unlikely to be reversed once debt ratios are reduced. Not until net debt levels are under control should total program spending be allowed to expand.

Moreover, the increase in the PLH sector's spending in certain categories between the mid-1970s and the end of the 1980s does not appear to represent a multiplication of government services as much as a rise in demand for services that were already in place. As Musgrave suggests, many new public programs in a postindustrial society are likely to be of a remedial nature,[28] and although postsecondary education and training and day care could fit this description, it is the spending that originated in earlier years and the hard-to-classify transfers to business that have risen the most. The implication for policy is that the goals of all income-support programs — personal and business — need to be clarified and re-evaluated. In addition, the present public-private split of funding postsecondary education needs to be re-examined.

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[28] Musgrave, *Fiscal Systems*, p. 79.

Overall, the stability of the size of real PLH expenditure relative to the economy since the mid-1970s is testimony to the fact that there is no reason to expect government to become larger indefinitely. Indeed, one wonders why the ratio has not dropped. Canada is one of the most affluent countries in the world, and at its advanced stage of development, the private sector's rate of spending might well be expected to have expanded faster than that of the public sector. Even those expenditure areas that are specifically in the public domain, such as postsecondary education, health care, and transportation, have substantial private-sector participation, which might be expected to increase with expanding wealth.

Why has the path of government expenditure not always followed what the stages-of-development considerations suggest? Common sense says that other factors also help to determine program expenditure. The next three sections examine some of them.

"Conditioning Factors" in the Growth of Real Government Expenditure Increases

Since there is no satisfactory way of developing a social demand function, Canadian governments have had to respond to a number of other signals and influences in deciding on the quantity of goods and services that they would provide. Musgrave gives the label "conditioning factors" to a number of variables other than rising incomes that influence the ratio of government spending to GDP.[29] The following sections examine four of them: demographic change;

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[29] Ibid., p. 83.

social factors; technological change and enhanced human capital; and political factors.

Demographics

A sizable increase or decrease in the absolute level of population is bound to influence government spending. It is not clear, however, that the net effect of an increase will be a rise in the ratio of total expenditure to GDP. Some categories of spending — for example, highway construction and maintenance in sparsely populated provinces — will encounter diseconomies of scale, while others — for example, fire and police protection — will have economies of scale.

The effect of changes in population composition is clearer. An increase in the cohorts of the young will stimulate demand for elementary, high-school, and postsecondary education and perhaps for day care. An increase in the proportion of the population over age 70 or 75 will increase the demand for institutional and health care.

In examining the rise and fall in the share of local expenditure relative to private consumption, I identified education as the relevant area. The postwar baby boom and high levels of net immigration spurred elementary and secondary education and thus expenditure growth in the 1950s and 1960s. Enrolment in elementary and secondary schools more than doubled between 1951 and its peak in 1971, and it had fallen 15 percent by 1985. Government spending on education over the period reflected the rise and to some extent the fall. Yet demographic change in the school-aged population was not the only influence at work. There were other factors supporting expenditure growth, such as the rise in the teacher-student ratio, the increasing education levels of elementary teachers, and the increasing average seniority of teachers. Consequently, even though the population aged 5 to 19 years was at about the same level by 1985 as it had been in the early 1960s, spending on elementary and secondary education as a proportion of GDP was higher.

Expenditure on postsecondary education was even more clearly affected by factors other than demographics. Although enrolment at the elementary-secondary level tended to mirror the demographic structure of the appropriate age group, enrolment at the postsecondary level did not. During the 1960s, full-time enrolment far outpaced the rapid increase in the university-age population. During the 1970s, it matched the university-age population growth, and then it declined for two years. But then it shot up, increasing by 26 percent between 1979 and 1985.[30] Part-time enrolments increased even faster.[31] As late as the mid-1970s, this resumption of enrolment growth had not been foreseen.[32] Rather, it was expected that the number of full-time students would be stable between 1977 and 1982 and then decline for a decade. The unexpected surge reflected the increase in adult education as well as the effects of the recession on labor-market opportunities. Thus, postsecondary educational expenditure hardly changed relative to GDP over the past 20 years. With the growing need for a life-time approach to education and training in response to constant changes in demand for skills, the importance of demographic trends on the demand for postsecondary education will likely diminish even further in the future.

Social Change

The predominance of the programs that make up the welfare state was a common element in the increase of government spending relative to the economy in all OECD countries between 1960 and 1982.[33] In Canada, the most rapid expansion of the welfare state took place between the mid-1950s and the early 1970s, but public demand for a greater government involvement in areas such as income security and education had been increasing gradually for some time. Important influences included:

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[30] The university-age population continued to grow at a fast pace in the 1970s, peaking in 1983, and then fell to the level of the mid-1970s by 1988.

[31] Between 1975 and 1985, it grew 51 percent (compared with a 29 percent increase in full-time enrolment). There were, however, tremendous variations across the country: the ratio of part-time to full-time students went from 51 to 92 percent in Quebec, 18 to 31 percent in Ontario, and 35 to 107 percent in Alberta.

[32] Economic Council of Canada, *A Time for Reason*, Fifteenth Annual Review (Ottawa: Supply and Services Canada, 1978), p.108. See also David Cameron, "Postsecondary Education: Some Thoughts on the Position of the Government of Canada," in Thomas J. Courchene, David W. Conklin, and Gail C.A. Cook, eds., *Ottawa and the Provinces*, vol. 1, *The Distribution of Money and Power* (Toronto: Ontario Economic Council, 1985), pp. 316–317.

[33] The timing of the expansion of social programs differed, however, from country to country. See Peter Saunders and Friedrich Klau, *The Role of the Public Sector: Causes and Consequences of the Growth of Government*, OECD Economic Studies 4 (Paris: OECD, October 1985), pp. 28–40, 95–105.

- The Depression, which had a powerful impact on Canadians' attitudes about the ability of average citizens to support themselves through a crisis.
- The white paper on employment issued by the federal government in 1946.
- The large number of World War II veterans who were given free university education, which many would not have been able to afford on their own. The benefits of government assistance in postsecondary education were firmly established in the minds of those people in the 1950s.
- The influx of immigrants in the 1950s, who came mainly from countries that had already taken major strides in establishing a welfare state.
- Canada's small but vigorous social democratic party.

During the 1950s and 1960s, the federal-provincial network of social welfare programs was expanded and upgraded. Although some of the programs provided merit goods, the lion's share of the welfare budget was for income support. In the 1950s, joint federal-provincial programs for the blind, the disabled, and uninsured unemployed replaced older provincial programs. Following the introduction of federal-provincial cost-sharing under the CAP in 1966, there was a substantial increase in provincial expenditure on social welfare relative to GDP.

Meanwhile, passage of the federal *Hospital Insurance and Diagnostic Services Act* in 1957 marked the culmination of Canadians' gradual acceptance of government-run hospital insurance.[34] Most of the elements of nationalized health were put in place by most of the provinces in the 1960s.

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[34] Although a number of experiments in the area of prepaid hospital and medical insurance had been made as early as the last century, the modern phase can best be dated from...

The explosion of income security, health, welfare, and post-secondary education programs after the mid-1950s appears to have had wide public support.[35] Some of the increase of government expenditure on social welfare presumably replaced private spending.

More to the point here, the later growth in government expenditures relative to GDP and the associated tax burdens could not have been anticipated at the time. For one thing, governments seriously underestimated the future costs of these programs.[36] For another, the unexpectedly high costs were not a big problem in the 1960s and early 1970s. In spite of quite frequent contractions, real GDP per capita grew at an annual average rate of more than 3 percent between 1955 and 1972, when most of the shared-cost social welfare programs that involved PLH expenditure were put in place. As Maslove, Prince, and Doern comment: "In the 1960s there was a growing fiscal pie for the two levels of government to cooperate over."[37]

Today the fiscal situation has changed, but public approval of welfare-state programs has not. Indeed, there appears to be a trend

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1946, when Saskatchewan's Cooperative Commonwealth Federation (CCF) government introduced a hospital services plan. The support of the federal CCF members of Parliament, the labor unions, and the Ontario government in the 1950s hastened the development of a workable plan at the federal level.

[35] There were, of course, interprovincial differences in the degree of public receptiveness of an increased role for government in citizens' lives, and even when there was general support for the principle of each initiative, there was not a uniform acceptance of the form. Some of these differences were revealed in the kinds of governments that were elected. It is unlikely, however, that Canada would have the same extent of public funding of health and welfare in all provinces without the vision and will of the federal government to achieve national standards.

[36] A good example of such understatement was Ontario's Drug Benefit Plan, whose costs, as is evident from comments made by the Ontario government, have greatly exceeded what was anticipated when free prescription drugs were extended to all senior citizens in 1975. See Ontario, Budget, 1988, pp. 78–79. The costs of hospital insurance and medical care provided similar surprises, which are detailed in J. Harvey Perry, *A Fiscal History of Canada: The Postwar Years* (Toronto: Canadian Tax Foundation, 1989).

[37] Allan M. Maslove, Michael J. Prince, and G. Bruce Doern, *Federal and Provincial Budgeting* (Toronto: University of Toronto Press, 1986), p. 30.

to extend financial help for more broadly defined needs. For example, work-related illnesses that are eligible for workers' compensation have been expanded in recent years, which has led to the increase in WCB benefits relative to GDP.

Technological Change

The past decade has seen a significant increase in the use of higher technology in the public sector, and, therefore, productivity gains may have been made in many areas within the jurisdiction of the PLH sector. The services likely to have benefited include health-care provision, education, police and fire protection, library services, and garbage collection, not to mention general administration.

In the private sector, technological advances can be expected to lead to the purchase of a larger quantity of goods or services because of the lower price per unit of production. In the public sector, there is no market-price mechanism to determine a market-clearing supply. The availability of, say, a new medical procedure or piece of equipment will lead to an increase in demand constrained only by availability. (Allocation will be by some form of rationing.) Thus, technological advances are likely to increase expenditure.[38]

Political Factors

Clearly, many political factors affect the growth of government. Two seem particularly pertinent to this study: the effects of large-scale representative government and the role of the bureaucracy.

Public-Choice Models. In a useful review of public-choice analyses of possible causes of government size and growth, Dennis Mueller describes a Swiss study that used one set of municipalities with representative democracy and a second with direct democracy. The author found, "All of the individual spending categories [in the representative democracies] are underestimated from the parameter estimates on the direct democracies."[39] Mueller comments that the greater passivity of the citizen in a representative democracy is enough to result in a higher level of government expenditure, and he reflects on the possibility that residents, confronted by a more and more complicated system of government, especially in federal states, may often feel more like passive spectators than the active citizens of a century and a half ago.[40]

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[38] The Quebec government, for example, has identified technological advances as an important factor in the growth of overall health spending in the province. Québec, Budget, 1987, Appendix F, p. 13.

The theory that representative democracy elicits a higher level of government expenditure than does direct democracy may be useful in helping to explain some of the trends in current-dollar spending in Canada's PLH sector. In many cases, an increase in the expenditure-to-GDP ratio for a particular function has resulted from the enhancement of an existing program or a rise in such a program's unit cost relative to average prices. Even if a majority of citizens supported the introduction of the program, it is most unlikely that the later enrichment or greater cost was ever an election issue or even the subject of a government poll. Consider, for example, Ontario's Drug Benefit Plan. It was introduced for elderly people who could show that they were in need of assistance, but the following year it was extended to all Ontario residents age 65 and over. Although the provincial government doubtless had its eye on senior voters when it enlarged the program, there is no evidence to suggest that the general citizenry either expressed support for the increased expenditure — and the implied increase in their taxes to pay for it — or could subsequently have shown a desire that it be canceled.

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[39] Quoted in Dennis C. Mueller, "The Growth of Government," *IMF Staff Papers* 34 (March 1987): 143. The original study was Werner W. Pommerehne and Friedrich Schneider, "Unbalanced Growth between Public and Private Sectors: An Empirical Examination," in Robert H. Haveman, ed., *Public Finance and Public Employment* (Detroit: Wayne State University Press, 1982), pp. 309–326.

[40] Mueller, "The Growth of Government," pp. 144–145.

Bureaucracies. In surveying studies of the effect of bureaucratic behavior on the rise in government expenditure relative to GDP, Borcherding concludes that there is considerable evidence of a positive result. Because civil servants appear to be twice as likely to vote as the average citizen, they are able to influence the size of government expenditure, especially at the local level. Canadian teachers and nurses, for example, constitute self-interested, fairly powerful voting groups.[41]

Bird, in reviewing the analysis of bureaucratic power and political influence, points out that an obvious way for bureaucrats to influence the size of government expenditure is through public-sector unions.[42] Given the power of teachers', nurses', and public employees' unions in Canada, it is easy to see why the level of employment may be insensitive to changing demand for service.[43]

Another way of exercising power is in contract negotiations. The threat of withholding services such as police and fire protection, garbage collection, nursing, and teaching is a powerful weapon to obtain public support for a demand for relatively high wage increases. (Unions do, however, run the danger of using the strike too often and thereby alienating the public.)

Cousineau and Girard conclude that "employment effects tend to be positively correlated with the presence of a public-sector union" and that total expenditure tends to rise as a result of the unions.[44] Tullock, looking at a somewhat different aspect of government and cost, points to the characteristics of bureaucracies that invite inefficiencies. For example, in most cases the government is a monopoly supplier; where there is a possibility of competition from the private sector — for example, in delivering mail — a competitor is faced with almost insurmountable handicaps. He notes that, in the United States, the main objection to the voucher system for paying for education has come from the teachers. Another major impediment to improving the efficiency of the bureaucracy is that it is very difficult to fire a civil servant.[45]

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[41] Thomas E. Borcherding, "The Sources of Growth of Public Expenditures," in T.E. Borcherding, ed., *Budgets and Bureaucrats* (Durham, N.C.: Duke University Press, 1977), pp. 63-64.

[42] Richard M. Bird, *Financing Canadian Government: A Quantitative Overview* (Toronto: Canadian Tax Foundation, 1979), p. 91.

[43] The usual response to a reduction in demand in the public sector is to allow attrition to reduce the staffing level. An illustration of this strategy was the sluggish response of the supply of teachers to declining enrolment in elementary and secondary schools in the 1970s. Since the ratio of older to new teachers increased, the reduction was later hastened by offering early retirement.

[44] J.M. Cousineau and A.M. Girard, "Public-Sector Unions and Government Expenditures," Cahier 2689, Centre de recherche et développement en économique, Université de Montréal, May 1989, p. 17.

Summary

As important as these "conditioning factors" have been in influencing the rate of expansion of various government programs, they do not satisfactorily explain the pattern of real total spending by governments relative to the real growth of the economy, particularly after the mid-1970s. If there was a constraint on the growth of government during the past 15 years, what was it? Let us return to the ratchet model and consider the implications of revenue availability.

Revenue Availability

Governments have two major sources of financing: taxation[46] and borrowing. In addition, Canada's PLH sector obtains significant funds through transfers from the federal government.[47] Buoyant flows from one or all of these sources may enable governments to introduce or extend popular programs without having to present the taxpayers with an explicit bill. When there are subsequent financing difficulties, because of taxpayer or financial market resistance, governments are forced to make some hard choices among competing needs or to renegotiate a social contract with voters.

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[45] Gordon Tullock, "What Is to Be Done?" in Borcherding, ed., *Budgets and Bureaucrats*, p. 281.

[46] For the purpose of this study, the royalties on oil and gas that are so important in some provinces should be seen as para-taxes.

[47] An analysis of the revenue of Canadian governments appears in Chapter 3. The point here is simply to examine what has happened to expenditure growth when that revenue was relatively easy or relatively difficult to obtain.

Many Canadian analysts and governments have noted the likelihood that easy revenue leads to a fast rate of expenditure growth.[48] One of Alberta's reasons for establishing its heritage savings trust was to minimize the risk of excessive expenditure stimulated by the flow of natural resource revenue.[49] The federal finance minister confessed in 1978:

> Many of our current difficulties have their roots in the period of extraordinary growth Canada experienced between the mid-1960s and the mid-1970s. With the great advantage of hindsight, we can see that we did not always use our good fortune wisely. Our economy boomed....Governments increased their spending too quickly....Too much was asked and given at the wage bargaining table....Too little attention was paid to the long-run efficiency of the Canadian economy, and its ability to compete....And so Canadians were not well prepared to deal with the shocks of the early 1970s.[50]

Perhaps the most obvious way in which government revenue can rise without legislated increases to the tax base or rates is through the operation of progressive PIT systems. First, when real income increases, tax revenue increases more than proportionately. Second, inflation raises individuals' nominal incomes, placing more people in higher tax brackets in an unindexed system, again increasing revenue.

In Canada, the strong rise in real incomes combined with an acceleration of inflation from the mid-1960s to the early 1970s resulted in buoyant growth of PIT revenue for both the federal and provincial governments, which may have influenced the timing and comprehensiveness of programs such as the CAP, medicare, and the period's numerous manpower and regional development initiatives.[51] Although the earlier old age security program had been designed to be financed by new taxation and unemployment insurance by premiums and although many provinces had turned to premiums or earmarked taxes to finance their share of hospital insurance, no such revenue measures were instituted to finance the programs that were introduced after the mid-1960s.

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[48] According to Maslove, Prince, and Doern (*Federal and Provincial Budgeting*, p. 243), expenditure growth in the early 1970s was "due to the influx of easy revenue." See also Bird, *Financing Canadian Government*, p. 92.

[49] Alberta, Budget, 1976, p. 5.

[50] Canada, Budget, April 10, 1978, pp. 5–6.

In contrast, when indexation of the PIT and slowing growth of real GDP reduced the income sensitivity of the tax system in the 1970s, few new programs were introduced. Since Canadian health-care systems were not as comprehensive as those of many other industrial countries, university tuition was not free, and auto insurance was still largely a private-sector responsibility, the slowdown in spending growth was certainly not because of a shortage of ideas for increases that would have been supported by sizable interest groups. Rather, one suspects that an income constraint was at work.

The most recent reform of the income tax system has reduced the number of tax brackets, further decreasing the income elasticity of the personal income tax. The restriction of indexation works in the opposite direction, however, and has once again caused tax revenues to increase faster than the tax base.[52]

Developments after the mid-1950s suggest another aspect of revenue availability and spending, one peculiar to Canada's federal-provincial structure. The federal government's need to justify holding on to the taxing power it had appropriated during World War II fostered a free-spending attitude in the 1950s and 1960s, which was enforced by the tax increases it had implemented to pay for Korean War expenditure and only partially reversed as defense spending was scaled back. Many huge federal programs, such as unemployment insurance and old age security, were self-financing, and Ottawa had few federal-only options to spend its surpluses on. It turned, therefore, to conditional transfers to the provinces, encouraging the adoption of programs for national health care, education, welfare, and regional development. In this way, it was able to retain a taxation power beyond its needs for its own spending responsibilities.

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[51] The *Adult Occupation Training Act* came into effect in 1967. Also in the 1960s, cash grants and tax incentives were made available to the private sector to expand activities in depressed areas (Donald J. Savoie, *Regional Economic Development* [Toronto: University of Toronto Press, 1986], pp. 24–26).

[52] See "De-indexing Brings Huge Personal Tax Increases," *The Canadian Taxpayer* 11 (no. 3): 17.

The availability to the provinces of CPP and QPP surpluses after the mid-1960s also cannot be overlooked as having been a possible stimulus to expenditure growth.

Thus, the availability of financing appears to have been a determinant of the path of government spending in Canada over the past 60 years. This finding confirms the operation of a ratchet effect in its less-than-catastrophic version. The Canadian taxes-to-GDP ratio has risen in a series of steps. Shortly after the beginning of the Depression, taxes began to rise faster than the economy. After World War II and the Korean War, the ratio did not fall back to prewar levels; indeed by the mid-1960s, it had climbed back to the 1940–46 level. The next shift was related to the 1981–82 recession, and the ratio has not retreated from those heights.

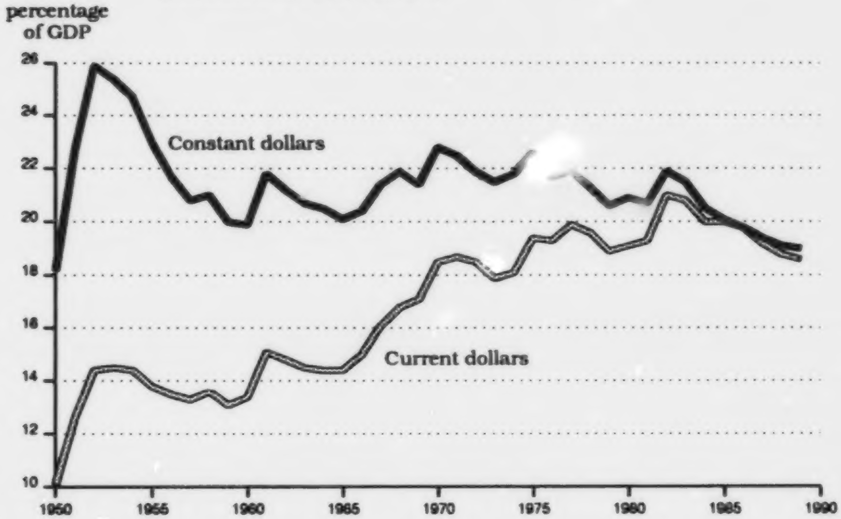
The Relative Price of Governmental Expenditure

Another possible explanation for increases in government spending — one that is complementary, not alternative, to several of the others — is that the provision of government services is simply becoming more costly relative to other uses of the economy's resources. Measuring government expenditure in current dollars conceals the path of government program expansion and the performance of the cost of those programs; an increase in current-dollar outlays does not show whether more services are being delivered or the costs of existing services is rising.

As already noted, the growth of the government-spending-to-GDP ratio in constant dollars has been slower than the growth of the same measure in current dollars, particularly since 1972 (see Figure 2.10). The implication is that the costs of government services have indeed increased relative to those of the overall economy.

Figure 2.10: ***Current Public Expenditure on Goods and Services, 1950–89***

(constant and current dollars)



Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts.*

Analysis of this phenomenon for the PLH sector demands consideration of productivity and of wage rates.

Productivity

The Productivity-Measurement Problem

Since economic activity is measured in current dollars, productivity is a key variable in determining the appropriate deflator. Productivity is slippery to measure in all cases, and it is particularly difficult in government, where the product is mostly services and there are no market prices.

A change in the value of production is composed of two elements: a change in the physical quantity of goods and services produced and a change in the price at which they are sold. The quality of the product may also change, so a constant problem in national accounting is to factor out any price change resulting from a change in quality in order to determine how much of the change in current-dollar GDP comes from changes in the physical aspects of production and how much from inflation. Even in the private sector, productivity cannot be calculated directly from market prices, which have to be adjusted for quality changes. Because quality changes in services are more difficult to measure than quality changes in goods, the economy's total of real services and, by extension, service productivity may well be underestimated.

Moreover, the capacity for productivity gains is smaller in the service sector than in the goods sector because services offer fewer opportunities for implementing new technology and because, as William Baumol notes, "There are a number of services in which the labor is an end in itself, in which quality is judged directly in terms of amount of labor."[53]

Most of the government sector's exhaustive expenditure is on services. And at the PLH level in particular, many of its services are those in which labor is an end in itself. As Baumol observed more than 20 years ago:

> [E]ducation...offers very limited scope for cumulative increases in productivity. The same is true of policy, of hospitals, of social services, and a variety of inspection services. Despite the use of the computer in medicine and in traffic planning, despite the use of closed circuit television and a variety of other devices, there is no substitute for the personal attention of a physician or the presence of a police patrol in a crime-ridden neighborhood.[54]

The problem of measuring service productivity is compounded in the public sector by the absence of a market price. Because government does not sell services in the market or set a price designed to cover costs and a markup, there is no unit price in the conventional sense. In only a few instances is the cost of public services made explicit to taxpayers. User charges are comparatively rare, and those that do exist — for example, recreational program tuition fees and highway tolls — seldom represent the cost of the service, let alone its market price. Even where revenue is earmarked for particular expenditure, the relationship is often obscure and incomplete — for example, health insurance premiums cover only a small percentage of health-care expenditure.[55]

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[53] W.H. Baumol, "Macroeconomics of Unbalanced Growth," *American Economic Review* 57 (June 1967): 416.

[54] Ibid., p. 423.

The statistical problem of measuring the government-sector contribution to GDP is handled by adding up the cost of the inputs, a large part of which is the total cost of the civil and para-civil service. In keeping with international practice, Statistics Canada assumes that productivity — output per employee — remains constant. When wages rise, therefore, they show up entirely as a price increase, with nothing attributed to an increase in value added. Thus, if there is an increase in productivity in any part of the public-sector work force, it will not be captured in the SNA. On the other hand, output may well be overstated. For example, the output in education is measured almost entirely by the number of teachers and other educational employees. An increase in employment thus translates into an increase in output. Studies suggest, however, that the pupil-to-teacher ratio is not positively correlated with an increase in pupil performance.[56] Stable productivity in the public sector may, in fact, be an optimistic assumption.

Efficiency in the PLH Sector

Since exhaustive expenditure is such an important share of spending in the PLH sector, the performance of productivity has important ramifications for the efficiency of government-provided services. If productivity in the public sector lags that in the private sector but costs — that is, wage rates — increase as fast or faster, there is a strong case for exploring ways of privatizing the delivery of many public services. There is a body of empirical work strongly suggesting that productivity growth in the PLH sector's "big ticket" services is lower than in the private sector and may even be declining.[57]

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[55] Government transfer payments merely redistribute income and are therefore outside this measurement problem.

[56] The measurement of pupil performance is another problem, but the number of students graduating or test achievements are only two of the possible proxies. These problems are discussed in Stephen T. Easton, *Education in Canada* (Vancouver: Fraser Institute, 1988), pp. 66–67. Similar productivity-measurement problems apply to other public-sector employees such as social workers and librarians.

The Civil Service. Achieving productivity growth in the civil service poses a different challenge. The options of having work contracted out are limited, and measurement of output and, therefore, productivity is almost impossible. The change in the ratio of civil servants to population is sometimes used as a proxy for productivity change, but the number of programs being administered needs to be taken into account. Provincial governments themselves seem to assume that an absolute reduction in staffing levels is synonymous with an improvement in productivity and also in efficiency.[58] Yet such an outcome is hard to prove or disprove from the way governments record and report on their operations.[59] When work is contracted out or two ministries are amalgamated, staffing levels will probably be reduced, but only in the second case is a productivity improvement likely to result.

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[57] It would be useful, therefore, to have some more up-to-date research done on the efficiency of these areas along the lines of the Economic Council of Canada study on hospitals: L. Auer, *Canadian Hospital Costs and Productivity* (Ottawa: Economic Council of Canada, 1987). One problem, of course, is that there are not many services for which the efficiency of private and public delivery can be compared. Studies of a few areas — garbage collection and fire protection, for example — have found that costs for private firms are much lower than for public firms. See Robert M. Spann, "Provision of Governmental Services," in Borcherding, ed., *Budgets and Bureaucrats*, pp. 82–84.

[58] For example, Quebec's finance minister voiced his expectation in 1983 that "greater flexibility in management...should bring about improved productivity and consequently a reduction in the growth of costs." He planned to achieve the gains by staff reductions (Quebec, Budget, 1983, p. 64). Similarly, the 1985 Ontario budget offered a chart showing increasing efficiency in the provincial public service as measured by the ratio of public servants to population. By this measure, efficiency deteriorated over the following three years, after which staffing levels were no longer included in the budget presentation (Ontario, Budget, 1985, p. 61, Chart C5).

[59] The difficulty of evaluating provincial productivity performance is illustrated by the vagueness surrounding an Alberta government statement about its commitment to achieving administrative efficiencies. "Program cost reviews" were to be done in "several departments" in order "to identify programs which might be capped, refocused with smaller budgets, or eliminated." However, "the introduction of new programs and expansion of others, along with normal staff turnover, will ensure that no staff layoffs will be required" (Alberta, Budget Address, 1989, p. 19).

The use of high technology in the civil service ought to produce an increase in productivity, but it may take a long time because of the practice of reducing staff through attrition. In any case, such an improvement will never be captured by the data. Empirical studies of public-sector productivity are scarce, particularly for Canada. Illustration of the problems must, therefore, rely rather heavily on the few studies that are available in either the United States or Canada. The two sectors for which some work has been done are hospitals and schools, with the latter area yielding somewhat more useful findings recently.

Hospitals. A study done for the ECC concludes that

> hospital productivity improved over the period [1961–79]...only if all of the greater service intensity, per hospital patient or per hospital task, yielded a corresponding quality improvement in the health status of hospital patients.[60]

Finding that the growth in the volume of hospital services was three times that of population, and that it reflected an increase in case and task intensity, the author suggests that the law of diminishing returns likely applies and cites data on obstetrical services to support his hypothesis: nursing assistance increased from 11 to 21 hours per delivery, one of the reasons being a 10 percentage-point increase in the proportion of Caesarian deliveries, although there is no consensus about the benefits of Caesarian over normal delivery (apart from particular cases).[61] The author estimates that for stable productivity, at least two-thirds of the increases in service intensity would have to have yielded the same improvement in quality of service.

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[60] Auer, *Canadian Hospital Costs and Productivity*, p. 36.

[61] Ibid., pp. xii, 56.

There is little evidence to support the general public perception that changes in Canada's age structure were a major cause of the rise in hospital expenditures from 1960 to 1980. The effects of declining birthrates offset the effects of aging on hospitalization rates. A survey of studies done by Spann in the United States lends weight to the ECC study's implication that hospitals have a lot of room for increased efficiency. Spann suggests that the substitution of private for public provision of health care is unlikely to lower quality but it might reduce the costs slightly.[62]

Elementary and Secondary School Systems. A recent study by the Canadian Federation of Independent Business indicates employers' widespread dissatisfaction with the products of the Canadian school system, suggesting that there may have been a decline in the output per student.[63] Many reports in the general media indicate a similar perception among the public at large.

The public education system is not designed to operate efficiently. Neither the size of the budget nor the revenue received by a school or a school board is based on output measures such as the percentage of students who reach certain achievement levels. Furthermore, school boards face little competition. Parents have only a limited right to choose the schools their children attend and no say in selection of teachers. The right of entry into the education labor force is restricted through teachers' accreditation procedure.[64]

In fact, the past 30 years have seen periods of declining productivity and rising unit costs in Canadian primary and secondary education. In the 1960s, counseling and other nonteaching tasks were assigned to teachers, and there was a trend toward specialization and a greater variety of courses. During the next 15 years, enrolment dropped — 15 percent by 1985 from its 1970 peak — the number of teachers continued to increase until 1976 and then declined by only 5 percent by 1985. Meanwhile the student-teacher ratio fell, from an average of 26.5 in 1970 until it bottomed out at 17.6 in 1979. A superficial conclusion from the reductions in the ratio is that there was an increase in output or "educational quality." Yet the evidence that student-teacher ratios have only an insignificant impact on academic achievement far outweighs the evidence to the contrary.[65]

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[62] Spann, "Provision of Governmental Services," pp. 86–89.

[63] Canadian Federation of Independent Business, *Notes on Small Business Perceptions of Educational and Training Institutions* (Toronto, March 1989).

[64] Many of these issues are examined in depth with reference to the U.S. system in Robert J. Staaf, "The Public School in Transition" and "The Growth of the Educational Bureaucracy," in Borcherding, ed., *Budgets and Bureaucrats*, pp. 130–147, 148–168.

Rationalizing school systems also seems to offer few gains in efficiency.[66] Throughout the 1960s in most parts of Canada, larger, more centrally located schools replaced most rural school buildings as well as some urban ones. One result was greater busing of students. An unpublished study found that, with consolidation, per student costs actually rose in Ontario.[67]

In reviewing efficiency in Canadian education, Easton observes:

> Canadians are paying a great deal more today without any obvious measure of increased output. To the extent that observed cost increases are linked with the education and experience of the teaching force and there are no clear changes in output quantity or

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[65] See Staaf, "The Growth of the Educational Bureaucracy," p. 154. Easton reports that only 9 out of 112 studies found that lowering student-teacher ratios had a positive effect on student performance, while 14 showed a significant negative impact (*Education in Canada*, p. 71). Furthermore, although some evidence suggests that the number of years of teacher experience favorably affects student achievement, 1977 and 1988 surveys of studies found no evidence that a teacher's degree level had any correlation with student performance (Staaf, p 153; Easton, p. 69). A possible explanation for these observed results is that although teachers can make a difference in student achievement through putting in additional hours and so on, they have no monetary incentive to do so because their salaries are based not on achievement levels but on educational and seniority levels (see Staaf, pp. 153–158).

[66] Staaf reports that U.S. studies suggest that no economies of scale can be achieved beyond an enrolment of 2,000 students, and there is fairly conclusive evidence that costs per student increased with increasing size of school districts. Staaf, "The Public School in Transition," p. 143.

[67] Michael McKee, "Monopoly and Public Schooling," Department of Economics, University of Windsor, 1985, discussed in Easton, *Education in Canada*, p. 64.

> quality — or at least no changes commensurate with the increases in cost — Canadian school productivity is declining.[68]

Summary

Statistics Canada's convention of zero productivity growth of the public-sector work force is not an unreasonable assumption in the aggregate. In fact, it may be overly optimistic in some expenditure areas.

Wages

Because wages and salaries are the biggest component of public consumption spending, particularly for local governments (because of the importance of school board expenditure) and hospitals (see Table 2.7), changes in rates virtually determine changes in the cost of public goods and services.

Thus, if government wage increases outpace inflation — as they often do — government spending on goods and services is likely to take up an increasing share of total expenditure and of GDP without more services being delivered. Unless government revenue also rises faster than GDP, budget-balancing becomes even more difficult.

Base wage settlements in the PLH sector have equaled or exceeded private-sector settlements in most years (see Table 2.8). The differentials have been especially large for para-public workers, such as teachers and nurses.

Political and equity concerns are of great importance in considering public wage bills. Wages in the civil service and para-public sector have a particularly high public profile. They make up such a large portion of government expenditure that an unexpectedly large union settlement can throw a wrench into budget plans. And citizens employed in the private sector, who may feel that they endure worse

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[68] Ibid., p. 70.

Table 2.7: ***Wages and Salaries as a Proportion of Government Spending, 1989***

	Percentage of	
	Current Goods and Services	**Total Spending**
Federal	63.7	14.8
PLH total	72.2	41.5
Provincial	50.6	21.1
Local	88.3	64.3
Hospital	86.7	80.8

Source: Statistics Canada, *National Income and Expenditure Accounts*, adjusted for intergovernmental transfers, capital consumption allowances, and public service superannuation fund pensions.

working conditions, are likely to resent paying for large increases through their taxes.

For all these reasons, governments are sometimes tempted to reduce expenditure growth by taking a hard line on wage increases. Yet this approach may be impossible if the employees are represented by a strong union. It may also be unfair if wages are rising sharply in the private sector or the relevant employees have long been underpaid — say, because they are part of a "pink-collar ghetto". Finally, such an approach may be counterproductive: if reimbursement is unattractive and workers have a choice, the best ones will vote with their feet.

All of these conflicting considerations seem to have been at work in the PLH sector during the past quarter-century, at various times and in various places. In the absence of comprehensive data on comparative wage rate performances in the public and private sectors, we are forced to rely on average base wage settlements for an overview of public-sector versus private-sector wage developments (see Table 2.8). After 1967, settlements in the PLH sector, on average, exceeded those in the private sector. The differentials were

Table 2.8: ***Effective Increases in Base Wage Rates, 1967–89***

	Federal Restraint Programs[a]	Private Sector	Provincial Administration	Local Administration	Education, Health, & Welfare	Consumption Deflator
			(percentage change)			
1967		7.7	8.5	12.4	9.1	4.0
1968		7.8	8.2	6.9	10.4	4.5
1969		8.2	8.5	11.3	8.3	4.1
1970		8.5	7.1	9.9	9.2	3.6
1971		7.9	7.9	9.3	8.5	2.4
1972		9.1	8.2	7.7	6.5	4.2
1973		10.4	10.2	9.8	10.2	6.4
1974		14.3	16.5	12.7	17.7	10.5
1975		14.7	21.4	16.3	21.7	10.6
1976	AIB	9.4	11.1	10.4	10.8	7.3
1977	AIB	7.4	7.8	7.7	6.7	7.4
1978	AIB	8.6	7.8	7.5	6.8	7.5
1979		10.9	9.1	9.4	8.2	8.5
1980		11.6	11.3	10.8	10.8	9.9
1981		12.7	13.5	12.7	13.5	11.3
1982		9.7	11.8	12.1	11.4	10.2
1983	6%	5.4	4.9	5.7	3.6	6.3
1984	5%	3.2	5.2	3.2	3.0	3.9
1985		3.4	4.4	4.7	3.4	3.7
1986		3.0	4.0	3.4	3.6	3.8
1987		3.9	4.5	4.2	4.2	4.0
1988		4.9	4.3	4.6	3.9	4.0
1989		5.3	5.7	6.1	5.9	4.7

[a] In 1976 through 1978, most wage settlements in the public and private sectors reflected the restraints associated with the Anti-Inflation Board of those years. In 1983 and 1984, federal government wage rises were held to 6 and 5 percent, respectively, and many provincial governments adopted the same program; in the private sector, many, but not all, firms used similar restraints.

Sources: J. Cousineau and R. Lacroix, *Wage Developments in Major Collective Agreements* (Ottawa: Economic Council of Canada, 1977), p. 17; Department of Labour, *Wage Developments Annual Review*, 1981; and Department of Finance, *Quarterly Economic Review*, annual reference tables, June 1990.

very large for health, education, and welfare workers in the late 1960s and 1970s, though not in the 1980s.[69]

One of the influences at work here was almost certainly the power of collective bargaining. It is important to remember here that public-sector unions are a relatively recent arrival on the Canadian labor scene. Although Saskatchewan and some municipalities had been bargaining collectively with their employees before the 1960s, unions became widespread in the Canadian public sector only during the five years or so after 1965, when Quebec granted formal collective bargaining rights to its employees.[70]

The new public-sector unions faced an interesting situation. Most of the public employees who deliver "essential" services face employers with monopsony power, which, in the absence of union bargaining, tends to keep wage rates depressed relative to those of other workers with similar skills. Further aggravating the situation of elementary school teachers and nurses was the fact that their ranks are dominated by women, who had a limited choice of professional careers at that time and who could keep the supply growing.[71] This supply effect was exacerbated by the maturing of the baby boom in the late 1960s and 1970s. The spread of collective bargaining rights introduced a strong offset to the power of monopsonistic school boards, hospitals, and other public employers. It is not surprising, therefore, that the 1970s were characterized by efforts on the part of various public-sector unions to achieve catch-up wage rates.

A number of studies have shown that unions in the public-sector have had a positive effect on wage rates, especially in the case of lower-wage groups. Wages in both teaching and nursing rose faster, on average, than wages in general in many provinces during the 1970s. Moreover, the effect of union power on fringe benefits and employment is likely to have an even more profound, longer-term impact on public expenditures.[72]

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[69] There is some evidence that teachers' salaries grew faster than private-sector wages from 1950 to 1983. See, for example, the comparison of the growth of teachers' salaries and manufacturing wages in Easton, *Education in Canada*, pp. 48–49. The same study and one from the government of Quebec show that Canadian teachers gained more than their U.S. counterparts during the 1970s and 1980s. See Québec, Ministère de l'éducation, *Indicateurs sur le situation de l'enseignement primaire et secondaire* (Québec, 1991), p. 27.

[70] By that time, hospital workers were part of the public sector along with school board employees and welfare workers.

[71] Other factors working against these female workers included the restrictions to mobility resulting from marriage or lack of fluency in English.

In addition to the interaction of monopolistic unions and monopsonistic employers, several other factors appear to have played an important role in wage settlements in the PLH sector. They include the public's tolerance of strikes, the federal government's efforts to reduce cost-push inflation in the 1970s and 1980s, and provincial concerns about soaring expenditures and deficits. Health, education, and welfare workers' wage settlements appear to have been affected by formal federal restraint measures — the Anti-Inflation Board of the mid-1970s and the "6 and 5" program of the mid-1980s — more than the wages of workers in other sectors, public or private. Quebec and British Columbia also took a particularly hard line with these workers in the early 1980s, further suppressing average increases for the country.[73]

Although many large settlements in the health, education, and welfare sector in the 1970s almost certainly embodied an element of catch-up from a low base, it seems less likely that workers in public and local administration needed increase differentials to close the gap with the private sector. A 1980 study of public- and private-sector compensation found that the hourly rates of pay at these two levels were invariably higher than for comparable jobs in the private sector.[74] Recent large gains in wage rates in the health, education, and welfare sector are likely the result of changes in demand and supply.

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[72] Cousineau and Girard, "Public-Sector Unions and Government Expenditures," p. 13; Jacob Finkelman and Shirley B. Goldenberg, *Collective Bargaining in the Public Service*, vol. 1, *The Federal Experience in Canada* (Montreal: Institute for Research on Public Policy, 1983), p. 369.

[73] A number of other influences on labor markets appear to have increased the bargaining power of these groups from time to time. In the 1950s and 1960s, the demand for teachers increased as the baby boom cohorts moved through school age. In the 1970s, however, educational requirements for teachers increased and student-teacher ratios were reduced. Similarly, the demand for nurses increased in the 1970s and 1980s as the number of hospital beds increased and the patient-to-nurse ratio was reduced. Moreover, as women have been able to make inroads into a variety of other professions, the potential supply of teachers and nurses may have fallen.

In the 1990s, the baby-boom echo — that is, the children of the baby boom — the aging of the baby-boom cohorts, and the continued gains made by women in diversifying their career choices will likely put further upward pressure on teachers' salaries; the last two factors will also affect nurses' salaries. To the extent that the market is working better, the relative wage gains should be of less concern than unions' apparent ability to raise the level of employment above what it would otherwise be and are certainly less worrying than large settlements in government administration. However, the absence of pay differentials for subgroups of workers with special responsibilities and skills — for example, chronic-care nurses or science teachers — means that high, across-the-board increases in wage rates may raise expenditures without solving the supply problem.

Of even more interest than wage developments is whether the public is getting a satisfactory return on its investment, and whether past wage levels have stimulated a work force that is now too large for the public to support without significant tax increases. It is necessary to take account of the output of these sectors more successfully than has been done in the past in order to make sure that costs do not keep increasing without the public's getting more value.[75] Moreover, incentives better than the educational achievements of the inputs need to be built into the system. The whole structure of the delivery system may need to be re-examined.

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[74] Mark J. Daniel and William E.A. Robinson, *Compensation in Canada: A Study of the Public and Private Sectors* (Ottawa: Conference Board of Canada, 1980), p. 11.

[75] For example, real average salary increases for teachers averaged 3.2 percent a year during the 1960s and 5.1 percent during the 1970s, while pupil-teacher ratios declined; yet educational achievement did not apparently rise. See Perry, *A Fiscal History of Canada*, pp. 791-92 (my own calculations of deflation of salaries).

Conclusion

It is commonplace to note that the rate of increase of government expenditure relative to GDP was spectacular in the two decades or so after World War II. In Canada, the increasing power of unions and union-supported political parties, the social impact of the Depression, and the expectation of a more interventionist role for government fostered by Keynesian economics helped to bring forth social policy programs such as unemployment insurance, family allowances, pensions for the elderly, health insurance, and subsidized advanced education. The economic rationale for the public sector's involvement in the provision of these services was the failure of the private sector to deliver the amount that voters in general deemed adequate. Although this inadequacy could have been dealt with in most cases by redistributing income, political factors more often than not favored universal programs, which eliminated the need for means or income-testing.

The first wave of post-Depression social programs, in place by 1952, were the responsibility of the federal government. From the late 1950s to the early 1970s, the major new or expanded programs were the responsibility of the PLH sector; it is thus not surprising that total expenditures in those years rose much faster at this level than at the federal level. Although total expenditure at both levels expanded at a far slower pace after the mid-1970s, barely exceeding GDP growth, it is this period that raises the most questions about the growth of public spending. Traditional theories shed very little light on the recent path of total spending. Only by disaggregating expenditure into economic or functional categories can one grasp some sense of the pressures behind the developments.

Without market forces to discipline either supply or demand, program expenditure is governed by substitute signals and forces, such as polls, lobbying, and the changing size of the client base. If these factors were allowed to determine the rate of growth of each government function unrestrained, however, total government expenditure growth would be uncontrolled. In the end, it is the ability of governments to raise the necessary funds to finance the total bill that determines the relative size of their spending.

The accumulation of fiscal action by the federal and provincial governments over the past 30 or so years has created an environment for the 1990s in which both the federal and PLH sectors have to make hard choices about spending. The federal government took advantage of its retention of taxing power from the war years to initiate a number of programs to be shared with the provinces. The generally buoyant revenue growth made possible by the catch-up economic growth of the postwar years and later by the windfall from the impact of inflation on progressive income tax rates encouraged the continuation of such initiatives. The provinces were only too willing to spend what was often no more than a 50-cent dollar on these programs. But they soon began to cost more than had first been anticipated. Too late, the federal and most provincial governments realized what the combination of hyperinflation, indexation, slower economic growth, and generous public-sector wage settlements meant for their budgets. Discretionary tax increases were politically unpalatable, and both federal and provincial programs were generally so entrenched that the public was not prepared to accept more than tinkering without a struggle. The recession of 1981–82 exposed the unendurable imbalances of so many budgets, and the majority of the provincial governments slowly started to grapple with these stresses and strains. There is still a great deal to do.

The following are among the fundamental points that the PLH sector must consider.

- Productivity improvement is a major issue at the PLH level. More realistic measures of output are needed, however, in order to better evaluate alternative delivery methods. Statistics Canada's assumption of zero productivity in the public sector does not contribute to an estimate of unit labor costs that bears any relationship to reality.
- Wage expenditure must be addressed — but carefully. That wage settlements in the PLH sector have generally been higher than those in the private sector does not mean that they are all out

of line. The markets for various PLH-sector workers are far from perfect, with an absence of competition among potential employers combined with the presence of a union being quite common. Although wage controls have a certain appeal for desperate governments, the results may bring different costs. For example, if the delivery of hospital care remains unchanged, wage controls for hospital workers will likely result in a labor shortage that will effectively ration health care in a capricious manner. Ways of relating wage increases to productivity need to be explored in all areas of the public service.

- Productivity and unit-cost improvements are urgently needed in primary and secondary education. Demographic changes have had a dampening influence on education spending since the 1970s and are forecast to do so through the next three decades.[76] Yet recent increases in per pupil costs in many provinces have apparently not been accompanied by an improvement in the quality of education. With little pressure from school-age population growth, an improvement in performance should not mean expenditure that is a source of increased pressure on aggregate provincial finance.
- The Canada-U.S. Free Trade Agreement has been useful in drawing attention to the need for improved adjustment programs for employees who lose their jobs for structural reasons. For this and other reasons, the PLH sector must face the fact that lifetime education is likely to become more and more important. Delivery systems and productivity need to be examined here.
- Governments cannot be complacent about the large postsecondary education sector if they want to keep program expenditure growth from putting renewed pressure on revenue or deficits in the future. Two issues of spending responsibility need immediate attention: the public-private split and the federal-provincial

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[76] Ivan P. Fellegi, "Can We Afford an Aging Society?" *Canadian Economic Observer*, October 1988, p. 4.15. What is foreseen is *aggregate* slow growth. Because of migration patterns, some provinces, such as Ontario and British Columbia, may experience an escalation in the rate of increase of school-age children.

split. First, the whole question of who pays for and who benefits from postsecondary education is overdue for re-examination. Individual beneficiaries are paying too small a share of the cost. One solution might be to subsidize students directly, taking into account both need and social returns. Second, the basis of providing government funding must be reconsidered. The federal government's transfers for postsecondary education under the EPF, as currently determined, are unrelated to provincial needs or to benefits that go beyond provincial borders. The federal government has to raise the funds for these transfers, but it effectively has no influence on postsecondary education.

- New delivery systems for health care must be sought. The upward shift that occurred in the ratio of health expenditure to GDP in 1983 appears to be permanent, and many provinces are now concerned about the possibility of nonstop escalation of costs of the whole gamut of health-care programs. True, a 1988 study by Statistics Canada on the future burden of health care, education, and pensions combined suggests that fears of their becoming unaffordable over the next 50 years are alarmist. Exploring the impact of demographic changes and allowing the unit costs of public-sector health care to increase according to recently observed trends, the author concludes that if the average GDP growth rate of the past 30 years continues into the future, these programs should not become more burdensome.[77] One can, however, question the assumption of a continuing trend in the unit cost of government-financed health care. There is considerable evidence that such programs as free drugs for senior citizens, laboratory diagnostic services, and denticare, although only a small percentage of total health expenditure, are growing very rapidly. Furthermore, as new procedures become available and widely known, the demand for health services generally accelerates. And governments still have to deal with the responsibility of caring for the growing number of AIDS victims. Thus, there is a high probability that by 2016 the growth rate of costs per working-age person will be higher than estimated. Moreover, beyond the 30 years of the Statistics Canada study, the aging baby boomers will likely be enjoying longer life expectancies and demanding the latest high-tech treatments, creating an almost insupportable burden for working-age Canadians. There is no easy answer to controlling the costs of a public health system and, presumably, the provinces will try a variety of solutions. Even if one best method does not eventually emerge, these studies should produce ways of controlling expenditures that are more satisfactory than informal rationing of services.

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[77] Ibid., pp. 4.1–4.34. Specifically, the study estimates that over the next 30 years, the annual average compound growth rate of constant-dollar health-care costs per working-age person will be 2.0 percent. The author projects the future cost of education as offsetting higher growth rates of health care and pensions; the combined costs compare favorably with the average annual rate of real GDP growth per working-age person of 2.1 percent during the past 30 years.

- Both levels of government would like to tighten up the social welfare system and lower the share of national income that is spent on this area. Some provinces are already in the process of implementing changes. Other ways of tackling the welfare burden have been undertaken through joint federal-provincial employment opportunity programs. It may, however, be necessary to reconsider the integration of general welfare payments with other income-support programs and the tax system at one level of government.
- Workers' compensation benefits are a separate problem that threatens to get bigger if the boards continue to expand the conditions that warrant compensation, particularly with long-term benefits. Little public attention is paid to this area, yet its rising costs affect competitiveness because they have to be funded by industry.
- Finally, ways must be found to make the size of the civil service and the quasi-public service react more quickly to a reduction in demand for the program or in the client base.

A slower increase in the expenditure-to-GDP ratio should be attainable in the PLH sector, permitting the addition of needed new programs. A strong case can be made for the presence of general inefficiency and high relative costs in the provision of public services. Demand for the goods and services provided by the public sector is insensitive to price, and governments have failed to link demand to the tax system. If governments are unable to control the costs of delivering the current mix of goods and services, the challenge will be either to convince taxpayers that they will have to sign over a larger share of their income to all the various levels of government that finance them or to reach a compromise about what programs to reduce or eliminate.

3

Financing PLH-Sector Expenditure

The share that government revenue now takes out of national income — the ratio of revenues to GDP — has reached a level that may already be jeopardizing the country's future productivity. Yet if expenditure growth is not sharply curtailed, this dangerous level will have to be raised further in order to deal with the deficits at both the federal and provincial levels. Meanwhile, there are ongoing demands for yet more government intervention in the economy. If they are acceded to — and some, such as more day care and environmental protection seem urgent — they will put more upward pressure on the revenue ratio unless existing spending demands are cut back.

Canadian taxing powers and spending responsibilities do not appear to be appropriate for the 1990s and urgently need re-examination. The federal and provincial governments share most tax fields, and the federal government's debt dilemma has led it to compete more and more aggressively with the provinces in some areas, particularly commodity taxation. At the same time, it has tried to reduce its share in the financing of programs that are the responsibility of the provincial-local-hospital (PLH) sector.

All levels of government are concerned about pushing the tax burden beyond prevailing public tolerance. Because there is more than one level of government and because the tax system is so complex, the burden is likely to reach a level that is counterproductive for both fiscal and economic health long before governments recognize that a limit has been reached. Fortunately, competition with neighboring jurisdictions provides some discipline.

Fears about pushing taxes beyond the public's endurance or a need to prevent rates from getting too far out of line with those of other provinces or countries may, however, lead to a period of deficit financing. The failure to raise adequate revenue to pay for the ongoing cost of programs fosters the illusion among voters that the programs cost less than they do. Other factors that contribute to fiscal illusion are the complexity of the system, which probably gives people the impression that they pay more tax than they do, and the failure to link the cost of a particular program with a particular part of the tax system, which encourages interest groups to believe that another group of taxpayers is footing the bill for their benefits.

Fostering fiscal illusion may serve some short-term political objectives, but in the end all citizens will bear the cost of an overtaxed economy through its reduced potential for economic expansion. High tax rates are powerful disincentives to engage in economic activities. Moreover, the higher the tax burden, the more complex the tax system is likely to be; a complex system tends to distort economic decisions and to make it increasingly difficult to ensure that the tax burden is equitable.

Thus, the tendency of the total-government-revenue-to-GDP ratio to rise indefinitely must be seen as posing a serious risk for the Canadian economy. Even if only measured growth is compromised at first, the shrinkage of the tax base that is implied by an expansion of underground activities means that the tax burden will fall increasingly heavily on those who have few avenues of avoidance. This group will then be discouraged from working, and the future growth of the economy will finally be dampened. Canadian governments need to recognize that a taxation share of national product of more than

40 percent is a danger zone for this country. The actual 1989 figure was 35 percent, but it would have been more than 40 percent if many Canadian governments had not relied on deficit financing, thereby increasing their debt and piling up problems for the future.

* * * *

Having explored the developments in and the forces behind the provincial-local-hospital (PLH) sector's expenditure, it is time to turn to the financing of that spending. In general, governments must either tax or borrow to pay for the services they provide; provincial governments also have transfers, conditional or unconditional, from the central government. It was because of this third source that, although the PLH sector's aggregate expenditure level outweighed the federal government's by a considerable margin by 1989 (see Table 2.2), the percentage of total government revenue raised by this sector was not much larger than that of the federal government.

Some History

The three decades following World War II were characterized by the provinces' ongoing struggle with a reluctant federal government to reclaim the taxing (and hence, spending) power they had surrendered to Ottawa during the war. Since the programs delivered by the PLH sector grew faster than those at the federal level, the federal government had little choice but to help. Initially, the assistance was through the transfer of funds to the provinces in compensation for some of the tax room lost, and for providing programs of the federal government's choosing. Eventually, however, Ottawa did return much of the taxing power to the provinces through a series of fiscal arrangements. Still, by the end of the 1980s, the federal government was raising about a fifth of the PLH sector's revenue.

In recent years, the battle over revenue-sharing has revived for two main reasons: the federal government's spending share has been slowly rising again during the past 20 years, and that government has been facing a worsening debt burden. The renewed battle has been most visible in Ottawa's moves to reduce the growth of the transfer payments that support much PLH-sector expenditure.

Financing problems at the aggregate PLH level did not become serious until about the end of the 1970s — although individual provinces, such as Quebec and those in Atlantic Canada, ran into difficulties earlier. The havoc wrought by the 1981–82 recession exacerbated the problems of many provinces. The 1980s became marked by concerns about their ability to go on financing the expenditure level that their programs entailed, especially since economic growth seemed likely to continue to be lower than the heady rates of the 1960s and early 1970s.

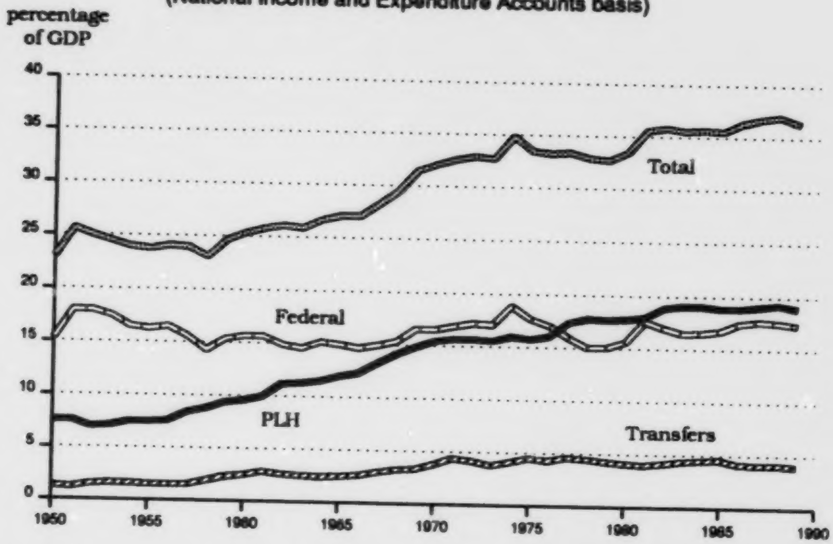
That struggle over tax sharing, which grew more heated as the federal government intensified efforts to contain the deficit, has now become part of the constitutional wrangling. The present situation, although very serious, at least offers an opportunity for the two levels of government to reach a more realistic and responsible arrangement of taxing powers.

Meanwhile, the weight of the tax burden does not appear to be a concern to either level of government. Yet both would do well to heed the fact that some countries that have become known for their hefty tax takes are now apparently doing somewhat worse economically than those countries that have placed a lighter yoke on their citizens (see the box on p. 111).

PLH-Sector Revenue Developments

The ratio of total government revenues to GDP shifted upward in each of the past four decades, with the sharpest increase from 1966 to 1974 (see Figure 3.1 and Table 3.1). During most of that nine-year period, the country was enjoying a vigorous economic expansion from which the progressive income tax system gained more than proportionately. The fiscal drag associated with rising real incomes

Figure 3.1: ***Adjusted Government Revenues, 1950–89***
(National Income and Expenditure Accounts basis)



Note: Excludes contributions to the Canada Pension Plan, Quebec Pension Plan, and public service superannuation funds. Transfer payments have been omitted from the PLH curve.

Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts.*

was exacerbated by an acceleration of inflation. The increase in personal income tax (PIT) revenue relative to GDP was not offset by revenue from commodity taxes, which rose in line with inflation.

Until 1976, the trends in PLH-sector revenue were heavily influenced by the federal government. Cash transfers to the provinces, which were less than 2 percent of GDP for most of the 1950s, had risen to 4.6 percent by 1977. Ever since, they have fluctuated between that level and 4.0 percent; the downward swing that started in 1985 is not likely to be revised.

During the period when cash transfers were growing faster than GDP, the growth of own-source revenues at the provincial-local level was boosted by the transfer of tax points from the federal government to the provinces, which resulted from changes in federal-provincial

Table 3.1: ***PLH-Sector Revenue-to-GDP Ratios, 1962–89***
(National Income and Expenditure Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
	(average percentage)					
Direct taxes on persons[a]	1.6	3.0	3.8	4.9	5.4	6.0
Direct taxes on corporate and government business enterprises	1.0	0.9	1.1	1.1	0.8	0.9
Indirect taxes	7.7	8.6	8.2	7.8	8.3	8.6
Other transfers from persons	0.6	0.9	0.8	0.8	0.8	0.8
Investment income	0.9	1.2	2.0	3.2	3.7	3.0
Total own-source revenue	*11.7*	*14.7*	*15.9*	*17.7*	*19.0*	*19.2*
Transfers from federal government	2.5	3.5	4.2	4.3	4.4	4.1
Current revenue[b]	*14.2*	*18.2*	*20.0*	*22.0*	*23.3*	*23.2*
Capital consumption allowances	1.0	1.1	1.1	1.2	1.3	1.1
Total revenue[b]	*15.2*	*19.3*	*21.2*	*23.2*	*24.6*	*24.3*

[a] Personal income tax and workers' compensation board contributions.

[b] Adjusted to exclude public service superannuation fund contributions.

Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

fiscal arrangements between 1952 and 1977. The growth of the federal government's revenue was depressed concomitantly. These federal-provincial changes were in recognition of the increased demand being put on provincial resources by the baby boom, new health programs, enhanced social services, and postsecondary education programs and facilities.

Own-Source Revenue

After 1977, the ratio of PLH-sector own-source revenue to GDP continued to rise steadily, though moderately, with an upward shift

International Comparisons

In 1987 and 1988, Canada's public-sector revenue as a percentage of GDP was about in the middle of those of a group of 18 countries of the Organisation for Economic Co-operation and Development.[*] The range of ratios was from 32 percent for the United States to more than 60 percent for Sweden. It is interesting to note that, in general, countries with a federal system of government tended to have revenue ratios in the lower half of the group.

After 1970, the rise in Canada's ratio was smaller than that of most of the 18 countries. The Danish, Swedish, and Japanese ratios increased the most, while those of the United States and the United Kingdom rose the least. Writing at the end of the 1970s, Paul Samuelson noted:

> That paragon of growth and the free market, West Germany, has a larger total tax fraction than the United States or the United Kingdom do....The Netherlands and Sweden are two nations whose public sectors have leaped above half their GNPs. Has Providence punished them for this profligacy? Not yet. Their growth rates have for decades been exceeding our best performances. I happen to think that their future productivity trends will be adversely affected by this heavy load.[**]

About a decade later, Samuelson's prediction has begun to come true. The three countries he mentioned have all done worse in average growth rates over the 1980s than the United States or the United Kingdom, even though the revenue-to-GDP ratio in West Germany and in the Netherlands was slightly lower in 1988 than in 1980.

There are still enough exceptions to the negative correlation between the ratio of revenues to GDP and the growth of real GDP — particularly Norway (high tax and high real growth rate) — to make it impossible to say conclusively that countries with the highest revenue ratios will not do as well in real output as countries that keep the burden down. Nevertheless, the evidence of the 1980s is sufficient to make governments consider the possible negative effects of a revenue share of GDP that is much more than 40 percent.

Indeed, the burden of taxes and levies should probably be *less* than 40 percent. Government revenue is not an exact measure of taxation since it includes some investment income — which offsets some debt-service charges. Since many of the countries with high revenue ratios have a large component of investment income, a tax-revenue-to-GDP ratio of 35 percent may be a more realistic limit for the sustainable tax burden.

[*] Organisation for Economic Co-operation and Development, *Economic Outlook*, June 1990.

[**] Paul Samuelson, "The Public Role in the Modern American Economy," in Martin Feldstein, ed., *The American Economy in Transition* (Chicago: University of Chicago Press, 1980), p. 669.

in the 1980s (see Figure 3.1). Although the increase in 1982–83 was partly the result of poor growth in GDP, discretionary tax increases were also responsible, as they were in 1987–88 in re-establishing the recessionary peak level. In the midst of the 1981–82 recession, a number of provincial governments moved to increase revenue from the personal income tax and the retail sales tax (RST).[1] Although cyclically sensitive sources, such as the corporate income tax (CIT) and resource revenues, may be badly eroded during a downturn, many provincial governments have resorted to discretionary tax increases that have more than compensated for the loss. Thus, the growth of total tax revenue has rarely been below that of GDP, even during recessions. The tax raises of the late 1980s were initiated in provinces where the strong growth of the Canadian economy had already contributed to buoyant growth in revenue.

Revenue Sources

Table 3.2 presents details of the major PLH-sector revenue categories — modified slightly from the breakdown in the National Income and Expenditure Accounts (NIEA). Three of them — PITs, RSTs, and property taxes — provided 59 percent of total PLH-sector own-source revenue in 1989. The property tax, which is still primarily raised by municipalities, and sales taxes accounted for about 16 percent each. Corporate income taxes and capital taxes made up a relatively small share of total revenues in 1989.

Until 1977, changes in the shares of the major components of own-source revenue were dominated by the previously described shifts of personal and corporate income tax room from Ottawa to the provincial governments. Personal direct taxes thus doubled in importance in a decade and a half, squeezing out property taxes and sales taxes. The share of total corporate taxes, on the other hand,

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[1] Between 1981 and 1988, seven provinces raised their RST rates, seven raised their PIT rates (five of them did so more than once), four levied surtaxes for various periods, three introduced new flat taxes on personal income, two increased their capital taxes, and two introduced new capital taxes. There were also other increases in health and social service premiums or taxes, as well as in liquor, tobacco, and fuel taxes.

Table 3.2: *PLH-Sector Revenue, 1989*

(National Income and Expenditure Accounts basis)

	Total Dollars	Per Capita	% of Total	% of Own-Source Revenue	% of GDP
	(millions)	*(dollars)*		*(percent)*	
Direct taxes on persons[a]					
Income taxes & succession duties	33,384	1,273	22.3	27.0	5.1
Employer contributions to workers' compensation	4,698	179	3.1	3.8	0.7
Total	*38,082*	*1,452*	*25.5*	*30.8*	*5.8*
Taxes on corporations					
Direct	5,396	206	3.6	4.4	0.8
Indirect[b]	1,719	66	1.1	1.4	0.3
Total	*7,115*	*271*	*4.8*	*5.7*	*1.1*
Real and personal property tax	19,511	744	13.0	15.8	3.0
Other indirect taxes					
Retail sales tax[c]	20,366	777	13.6	16.5	3.1
Gasoline tax	4,456	170	3.0	3.6	0.7
Profits of liquor commissions	2,341	89	1.6	1.9	0.4
Business licenses, permits, fees	1,628	62	1.1	1.3	0.2
Misc. taxes on natural resources	330	13	0.2	0.3	0.1
Miscellaneous revenues[d]	5,812	222	3.9	4.7	0.9
Total	*34,933*	*1,332*	*23.4*	*28.2*	*5.4*
Other current transfers from persons	4,872	186	3.3	3.9	0.7
Investment income					
Interest[e]	12,917	493	8.6	10.4	2.0
Remittances from government business enterprises	2,710	103	1.8	2.2	0.4
Royalties	3,606	138	2.4	2.9	0.6
Total	*19,233*	*734*	*12.9*	*15.5*	*3.0*
Total own-source revenue	*123,746*	*4,720*	*82.7*	*100.0*	*19.0*
Transfer payments from fed. gov.					
Established Programs Financing	8,684	331	5.8		1.3
Taxation agreements[f]	8,282	316	5.5		1.3
Territorial financial agreements	1,275	49	0.9		0.2
Canada Assistance Plan	4,745	181	3.2		0.7
Regional Economic Expansion	228	9	0.2		0.0
Other	2,582	98	1.7		0.4
Total	*25,796*	*984*	*17.3*		*4.0*
Total revenue	*149,542*	*5,704*	*100.0*		*22.9*

[a] Excluding employer-employee contributions to public service superannuation funds, but including Quebec payroll tax.

[b] Including capital taxes.

[c] Including liquor, tobacco, and amusement taxes.

[d] Including Manitoba's payroll tax.

[e] Including public service superannuation fund interest.

[f] Including equalization payments.

Source: Statistics Canada, *National Income and Expenditure Accounts*; author's calculations.

gradually slipped, even though the split between the federal and provincial governments was shifting in the latter's favor. Investment income began to increase its share in the early 1970s, as royalties from oil and gas spiraled in the wake of the first oil price shock, but these gains were not well dispersed across the provinces (see Table A.3 in Appendix A).

After the last transfer of tax points from the federal to the provincial governments in 1977, the changes in weights of the various revenue sources were relatively small. Paralleling developments at the federal level, the PLH sector continued to rely less on corporate taxes and to lean more heavily on taxes levied on individuals. The share of personal income taxes rose between 1981 and 1988 primarily because of aggressive increases in rates by seven provinces.

The revenue share of RSTs rose in the 1980s because increases in these taxes were attractive to a number of provinces during the decade. (Taxes on consumer spending had maintained a fairly stable ratio to GDP until the mid-1970s and then had weakened, partly because the federal government had created some tax room in the second half of the 1970s by reducing of its own sales tax rate — see Figure 3.2.) Although property taxes lost some share, indirect taxes in aggregate increased theirs.

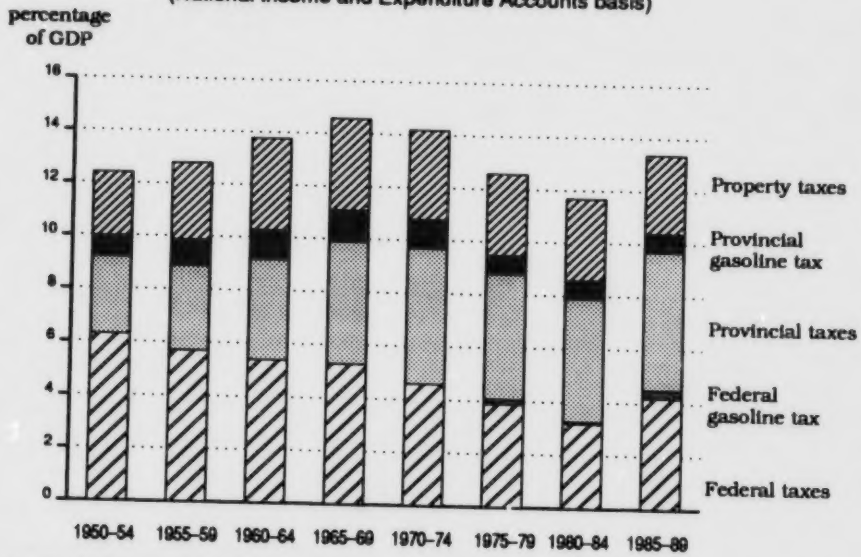
Until the mid-1980s, the share of investment income continued to grow because royalties from oil and gas increased substantially in the 1970s and early 1980s and because the saved portions of resource revenues were earning more and more, especially in the Alberta Heritage Savings Trust Fund. From 1985 to 1988, however, the investment-income share fell as the west battled a fall and protracted weakness in energy prices.

The Revenue-to-GDP Ratio

The pattern of revenue growth related to GDP growth in the PLH sector tells a story very similar to that of the sector's own-source revenue developments. Indirect taxes, though by far the most im-

Figure 3.2: ***Indirect Federal and Provincial Government Taxes, 1950–89***

(National Income and Expenditure Accounts basis)



Note: Excludes corporate taxes, and oil and gas levies.

Sources: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*; Canada, Department of Finance, *Public Accounts of Canada*.

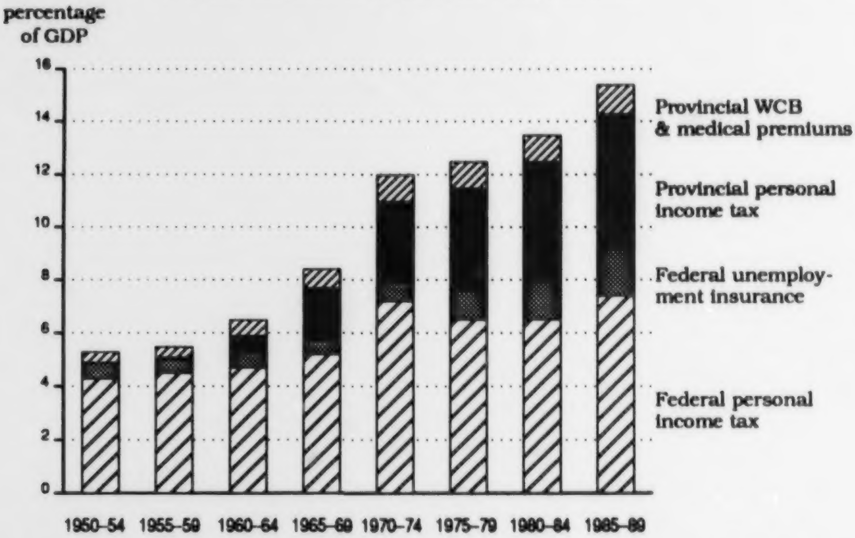
portant category, have hardly grown faster than the economy (Figure 3.2), where-as personal direct taxes continued to grow faster than GDP even after 1977 (see Figure 3.3). Corporate tax revenue increased faster than GDP briefly after 1977, but the ratio had settled back to a somewhat lower level by the late 1980s (see Figure 3.4).

Transfers from the Federal Government

Cash transfers from the federal government make up a major share of provincial revenue — over 17 percent in 1989. Total Established Programs Financing (EPF) transfers were the largest single category, followed closely by equalization payments (see Table 3.2).

Figure 3.3: ***Personal Income Taxes and Other Direct Charges, 1950–89***

(National Income and Expenditure Accounts basis)

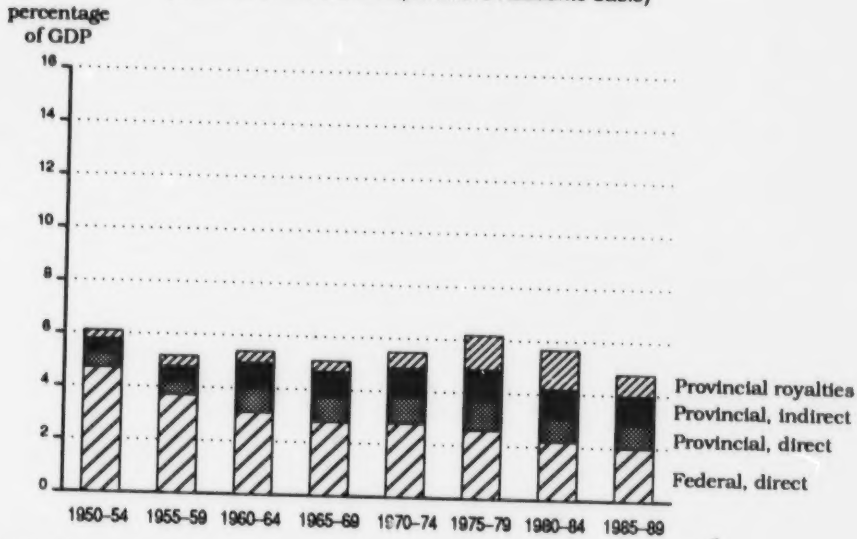


Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts.*

Because of the equalization payments, transfers from the federal government make up a particularly large share of revenue in the have-not provinces. For example, in 1989, total transfers were 41 percent of PLH-sector revenue in the Atlantic provinces together. Equalization payments alone accounted for 24 percent and, for each of the four, such payments were the single most important source of revenue. For Quebec, federal transfers (adjusted for the tax abatement) were 23 percent of revenue in the PLH sector; in Manitoba and Saskatchewan, they were 25 percent and 18.5 percent, respectively.

The three major programs — equalization, EPF, and the Canada Assistance Plan (CAP) — account for the lion's share of federal cash transfers, not to mention most of the provinces' complaints against the federal government. Nevertheless, substantial sums are paid out under a host of other programs (see Table B.1 in Appendix B), and

Figure 3.4: ***Corporate Taxes, 1950–89***
(National Income and Expenditure Accounts basis)



Source: Author's calculations, using data from Statistics Canada, *National Income and Expenditure Accounts*.

they also engender their share of bickering. (For example, the Fiscal Stabilization Program, which paid out less than $300 million between 1967 and March 1990, has been the cause of much bad feeling on the part of the Alberta government.)[2]

Because transfers represent such a large share of federal government expenditure, it is not surprising that Ottawa has been trying to restrict their growth as part of its effort to reduce its deficit. Most of the effort has been directed at EPF payments, although limits have also been placed on payments for equalization, the CAP, and programs such as the Atlantic Canada Opportunities Program, the Western Diversification Program, and the Fiscal Stabilization Fund. Thus, provinces that had come to expect a multifaceted federal sharing of their expenditure responsibilities have had to accept that their budget planning may be hurt by reductions in anticipated federal payouts.

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[2] After the program's reform in 1967, the federal government made no payments under it until the 1980s, and the total payout has so far amounted to less than $300 million. British Columbia claimed $174 million for 1982 and received it in 1983 and 1984. The program was modified in 1987 to restrict the transfer to $60 per capita, with the balance of the entitlement to be in the form of a five-year interest-free loan. Alberta made a claim in 1987 with respect to a 30-percent drop in its revenues in 1986. The federal government had not completed negotiations with the province by March 1990, although an interim $75 million was paid by June 1989. See Alberta, Budget, 1989, p. 22.

The Tax Burden

In Canada's federal system, three levels of government tax the same taxpayer, and two of those levels tax most of the same bases. Federal and provincial governments have to take into account each other's taxes as well as the aggregate burden, which obviously has a limit. What this limit might be is a matter of great concern by various governments. For example, the Quebec government repeatedly referred to "a limit to taxation" and the province's too-high tax burden in its budget speeches from 1977 to 1984.[3] In 1977, the Quebec finance minister felt that the national average was the key constraint, but there was no indication of how it was calculated.

Defining the Tax Burden

At the national level, the tax burden may be seen as public-sector taxes and other levies — social security contributions, royalties, and so on — as a percentage of GDP. The ratio of PLH-sector taxes and levies to GDP, however, understates this sector's contribution to the burden because of the role of federal transfers. Nevertheless, the ratios considered here recognize only the level of government that levies the tax.

There are other difficulties in the concept of a jurisdiction's tax burden. Since transfers to persons or businesses are actually negative taxes, the true cost of government should be revenue minus these transfers. Not all taxpayers are transfer recipients, however, and the net measure does not take into account the coercive aspect of this taxing-transfer function. Furthermore, all taxes and government charges should be included, because in the end they are borne by people.[4] Thus, the ratio of gross government taxes and levies to GDP is probably the best measure of the broad impact of government revenue.[5]

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[3] See, for example, Quebec, Budget, 1977/78, p. 11; 1981, p. 28; 1984, p. 15.

Limits to the Tax Burden

Persistent deficits witness government fears about reaching a limit to taxation; there may be quite a long period during which a perceived revenue constraint is not allowed to interfere with increased spending. The history of finance in a number of provinces has shown that expenditure growth is only slowly checked by the prevailing conception of the limit to taxation because deficits have been tolerated by voters and politicians for reasons other than stabilization or financing investment.

Eventually, however, revenue has to be raised. The ratio may rise to cover what appears to be a temporary shortfall caused by such "emergencies" as agricultural disasters, commodity price collapses, or unforeseen interest-rate or wage-rate hikes, but more often than not it never permanently returns to its earlier level. The new height establishes a new limit, which then influences the expenditure growth path. Eventually, the peak ratio is reasserted. In this way, the perceived tax limit ratchets upward over time and, in response, the economy adapts.[6] Although the total-revenue-to-GDP ratio in Canada fluctuated between the mid-1950s and the end of the 1980s, the underlying trend was stepwise (see Figure 3.1).

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[4] To the extent that some taxes are shifted to and from foreigners, however, the ratio will still be flawed.

[5] All measures of government revenue, like those of expenditure, are deficient to some degree since tax credits and other tax expenditures are netted out. In this respect, the NIEA measure is the least accurate, although it has the advantage of consistency over time, as well as being available for a long historical series. It bears emphasizing that all contributions to the Canada Pension Plan, the Quebec Pension Plan, and public service superannuation funds have been excluded for the reasons given previously.

[6] Recall from Chapter 2 that the theory of upward shifts in expenditure caused by periodic "less-than-catastrophic" events incorporates an hypothesis of rising tolerance of taxation.

Nevertheless, however tolerant taxpayers become of assigning a higher proportion of their resources to their collective governments, once they suspect that their individual or even social welfare is not rising with their tax burden, governments face the risk of a serious erosion of the tax base. At this point, restraint of the growth of expenditure becomes virtually unavoidable. The political choices to be made then are not pleasant.

Fiscal Illusion

Why do voters not resist the expansion of government spending when they will eventually have to accept a rising tax burden that they also dislike? Citizens' apparent lack of interest in dismantling, scaling back, or simply restructuring present programs such as education, health, and social welfare may be explained by the existence of a large measure of fiscal illusion. Governments that rely on long-term deficit financing — other than to finance an extraordinary increase in expenditure or a short-term loss of revenue — break the relationship between spending and taxation and thus encourage voters to think that they can indeed have their cake and eat it too.

The public-choice models of democratic governments imply that consumers, who communicate their demands for public goods to their elected representatives, know the costs and benefits of the programs they want.[7] To the extent that the fiscal system is too opaque or complicated for the average citizen-voter to make such calculations, however, expenditure decisions will not reflect true costs and benefits, and the result will be economic inefficiency.[8] If taxpayers believe that their tax burdens are higher or lower than they really are, they can be said to suffer from fiscal illusion. An illusion

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[7] This section draws on Charles J. Goetz, "Fiscal Illusion in State and Local Finance," in T.E. Borcherding, ed., *Budgets and Bureaucrats* (Durham, N.C.: Duke University, 1977), p. 176.

[8] Another source of inefficiency arises if a subgroup believes that it will benefit from a particular program but that the costs will be borne by other taxpayers either today or in the future.

Provincial Financing Constraints and Problems

When they need to raise money in capital markets, provincial governments face a greater variety of constraints and problems than does the federal government. One such problem is how to ride out what appears to be a temporary period of high bond yields. The options are limited because provinces, unlike the federal government, have limited access to money market funds. Provincial treasury bills are still only a minor share of PLH-sector total borrowing, although almost all provincial governments issue them and they may become more important as interest rates rise. (All provinces but Prince Edward Island and Nova Scotia issue treasury bills, although New Brunswick and Saskatchewan do so only occasionally. Terms are usually three months, but British Columbia has a weekly and Quebec a monthly six-month auction, while Alberta has sometimes issued six-month bills.) Both Quebec and Alberta were able to arrange large lines of credit with banks as a back-up source of financing during difficult times in the past.

In response to the historically high real interest-rate regime of the 1980s, many provinces have tended to issue shorter-term bonds than they did in previous decades. For those provinces that already had a high net debt ratio and a credit rating well below Ontario's, borrowing at current high real bond rates had become very unattractive. The shortened term means debt-service costs will respond more quickly to changes in interest rates.

From time to time, provincial governments and government business enterprises turn to foreign sources of financing. They do so for many reasons. For example, the borrower may find it difficult to raise money in the Canadian bond market because of the size of the issue, because there is a poorly developed retail market, or because the federal government has crowded out the provincial borrower.

of lower taxes is likely to contribute to the demand for more services and hence increased government expenditure.[9]

Visibility

Some forms of taxation are more likely than others to contribute to illusion about the overall tax burden. The PIT is direct and visible. Even though the withholding system may lower people's awareness

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[9] Of course, it is possible that taxpayers underestimate the true benefits of government expenditure. In that case, they demand too little, which is also inefficient.

Provincial Financing Constraints and Problems - *continued*

Quebec and Manitoba tapped many foreign markets in the mid-1970s, a fact that was not an unmixed blessing given the swings in currency values since that time. In some instances, these liabilities gave rise to substantial increases in debt servicing and exchange-rate losses in principal repayments.*

Although flexibility in managing liabilities varies from province to province, all provinces that run chronic deficits must face the discipline of the market — expressed as the threat or actuality of a downgraded credit rating — which will eventually slow the rate of new borrowing and hence deficit financing. Jacques Parizeau, then Quebec's Minister of Finance, recognized the problem in 1977:

> The flash in the pan of 1976 contributed to such an increase in the holdings of Quebec bonds by a great number of financial institutions that any plans to continue a high level of borrowing are compromised for years to come. What must be done is clear: if we are to restore the financial situation, borrowings must be reduced.**

* Some provinces have since dealt with the problem by swaps and early refinancing. For example, in 1987 the Manitoba government announced its intention of negotiating swap agreements for issues denominated in currency other than Canadian or U.S. dollars in 1988 and said that its Department of Finance was continuing to "pursue favourable opportunities for switching the Province's off-shore currency liabilities into North American currency liabilities." Manitoba, Budget Speech, 1988, p. 32.

** Quebec, Budget Speech, 1977/78, p. 19.

of what they pay, the completion of tax returns at the end of the year probably dispels most of the illusion.

More illusion is likely to be associated with commodity and corporate taxation. Goetz questions U.S. taxpayers' perception of the amounts they pay in general sales taxes at the state level, even though these taxes themselves are highly visible.[10] In Canada, until the institution of the goods and services tax (GST) in 1991, provincial RSTs were far more visible than federal sales taxes, yet a large proportion of the revenue came from the business sector. Whether commodity and corporate taxes are finally paid by employees, consumers, or shareholders, most are clearly borne by the country's citizens — people presumably no better informed about tax incidence than economists, who have been unable to agree on what it is.

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[10] Goetz, "Fiscal Illusion in State and Local Finance," p. 179.

The property tax, which is important both as a source of revenue for local governments in Canada and as a share of total PLH-sector revenue, also appears to be highly visible. There are, however, reasons to believe that the majority of citizens who eventually bear the tax are not conscious of that fact or of the amount they pay. Goetz cites the divergent opinions of renters and mortgagors on the one hand and older people on the other.[11] Many of the latter, who own their homes outright, are well aware of the amount of their property tax because they pay it directly — and, for the most part, find it objectionable. North American renters, however, pay the tax indirectly, and mortgagors pay it through an escrow account.

Complexity

The complexity of the entire Canadian tax system makes it almost impossible for individuals to know what their burden really is. There are many different types of taxes and charges. Moreover, the structure of income taxes has become more complicated as a result of both the federal government's reforms in the 1980s and the increasing number of individual provincial variations. Added to this is the fact that in three provinces, corporations must deal with at least two separate corporate taxes, while a corporation operating in more than one province must deal with a sizable number of tax offices.

There appear to be a number of reasons why the tax system has become so obscure. In the case of taxes levied at the national level, the decision about what type of vehicle to use to raise revenue should be fairly straightforward, attempting to be nondistorting or weighing such issues as the effect on savings and consumption and the risk of losing profits or factors of production to foreigners. At the provincial level, the risk of losing people, business, or tax revenue to another jurisdiction is much greater, giving added incentive to the use of taxes that minimize those risks, thus increasing the complexity of the tax system. Another reason for "new" taxes appears to be the desire to tax a source that has been able to escape conventional vehicles or, in the case of the provinces, to get the federal government to shoulder some of the burden.[12] Introducing add-ons to the basic tax may have a social objective, however, such as increasing the progressivity of the PIT, which is not under the control of the province.

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[11] Ibid., p. 181.

Whatever the rationale for the proliferation, an additional objective may be to foster any existing fiscal illusion about the burden or permanency of a tax. For example, wage earners may believe that payroll taxes — for example, workers' compensation premiums — are actually borne by corporations, even though the tax must eventually be borne by employees or shareholders; a surtax may be thought to be temporary. The end result has been vastly different provincial systems replete with hidden taxation, all of which are too convoluted to allow average taxpayers to assess their total tax bill accurately.[13]

Tax Proliferation

As rising expenditure and deficits have forced governments to increase the overall tax burden, any concern that they might have had about neutrality in the tax system has given way to the objective of raising revenue in what appears to be the least painful way. Governments seem more concerned about the saturation point of a particular tax field than about the total tax burden or the distortions to economic decisions that the overall system causes.

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[12] A payroll tax, for example, has to be paid by the federal government on its own payroll and is also deductible for federal profits tax purposes; a capital tax is paid by a corporation to the province where its capital resides, regardless of where the profits are allocated.

[13] In an effort to simplify this calculation, the Fraser Institute has developed a guide for the average Canadian family: Sally Pipes and Michael Walker, *Tax Facts* (Vancouver: Fraser Institute, various years since 1976). Although this periodic analysis has made an important contribution to some Canadian citizens' awareness of their tax payments, it is unlikely that a majority makes use of it.

Horizontal equity, another desirable goal of the tax system, also appears threatened by the proliferation of taxes. In the case of an employer health tax, for example, it is generally agreed that the incidence is on wage earners. Yet, because all citizens are potential beneficiaries of, say, public health-care programs, horizontal equity would require that everyone in the same economic circumstances pay the same amount for health care.

The evolution of the tax structure suggests that governments believe that the saturation point of each tax field can be raised if there is more than one spigot. Thus, we now have progressive PITs embellished with flat-rate income taxes, temporary surtaxes that have no time limit, and new taxes on payrolls that are simply different forms of taxes on earned income.

A major reason further increases in the PIT have become unattractive to the federal and many provincial governments is the massive rise in its effective rate since 1967 (see Figure 3.3). Similarly, the long-term stability of the effective rate of commodity taxation (see Figure 3.2) has probably been an important consideration in the increased interest in this base. The federal government's move to a value-added tax is now seen by some provinces as a threat to their future claims on this source.[14]

When U.S. tax reform reduced marginal corporate tax rates in that country in 1986, Canadian governments found themselves restricted in their ability to increase their CITs, even though the effective rates and the revenue relative to GDP had fallen dramatically since the 1950s. A serious result of differential CIT rates is the ability of transnational and transprovincial firms to use transfer pricing to reduce their taxable income in the higher-tax jurisdiction. Capital taxes — another form of corporate taxation that avoids the transfer-pricing problem — are, however, now gaining popularity at both levels of government (see Figure 3.4).

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[14] See Quebec, Budget, 1989, p. 25.

Finally, the fear of unwittingly reaching the saturation point has led to renewed competition between federal and provincial governments for tax room. The fact that the same citizens pay all of the taxes, regardless of which treasury they go to or how they are levied, appears to have been largely ignored, especially by provincial governments. (The federal government may pay some attention because it must increasingly take into account the costs of allowing tax burdens to get out of line with those of Canada's major trading partners.)

The Effects of Rising Revenue-to-GDP Ratios

The concern about the level and direction of the share that taxation takes of national product is that a higher tax burden will change Canadian society. A government that taxes a major part of a country's income makes major decisions about how resources are deployed, influencing the efficiency and thus, the competitiveness of the economy. As Richard Bird puts it:

> There is, I think, some inherent plausibility in the idea that when taxes take 50% or 75% or 90% of national income and rechannel it through government, then the character of our economy will have changed beyond recognition. Similarly, increasing tax burdens on private economic activity will, after some point, surely lead to the effective elimination of that activity.[15]

The three levels of government in Canada are not yet commandeering the percentages of national income that Bird mentions. But no one really knows the breaking point. It may take many years for the negative effects of too onerous a tax burden to become visible, and it is likely that some societies are prepared to hand more decisions over to their governments than others. Nevertheless, the experience of several OECD countries (see the box on p. 111) suggests that the critical threshold may be a 40-percent ratio of total public-sector revenue to GDP — and a much lower ratio if only taxes and levies are considered — regardless of how many services the revenue pays for.[16] At this level, the marginal rates begin to bite enough to cause a significant number of taxpayers to explore all the ways of reducing their share.[17]

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[15] Richard M. Bird, *The Growth of Government Spending in Canada* (Toronto: Canadian Tax Foundation, 1970), p. 104.

Thus, Canadian governments are in a predicament. Today, various taxes absorb more than a third of national income, and that revenue does not cover the present level of public expenditure. If the aggregate budgets had been balanced in 1989, gross taxes would have been more than 40 percent of GDP. Moreover, any government that wishes to increase taxes to reduce its deficit will face the enormous problem of raising the burden without raising the level of services. The share that all government revenue takes of GDP is already 40 percent in Quebec and Ontario and close to 40 percent in Nova Scotia and New Brunswick.[18] An immediate increase in taxation to cover the deficits of both levels of government would likely increase the attractiveness of the underground economy and prove a considerable disincentive to work in those four provinces.

Pundits have frequently predicted a taxpayer revolt as various levels of taxation have risen.[19] It has never been clear how a revolt would be manifested in Canada, which has no mechanism for direct votes on tax changes — in contrast to the situation in California, for example. Yet it would be wrong to assume that individual Canadians have not already rebelled. The widespread hostility toward the GST may be interpreted as a kind of revolt.[20]

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[16] For more discussion of this threshold, see my *Strong Medicine: Budgeting for Recession and Recovery*, C.D. Howe Institute Commentary 27 (Toronto: C.D. Howe Institute, 1991), pp. 11–12.

[17] To the extent that activity is pushed underground, the relative deterioration in economic performance by the high-tax OECD countries may simply be a function of measurement. The problem then becomes mostly fiscal.

[18] These raw ratios take into account where the revenue is raised, not where it is borne. Consequently, they do not represent the true tax burden of the residents of those provinces. They do, however, serve to give a rough idea of the variations in the size of the burden across the country that lie behind the aggregations.

[19] See the discussion in Richard M. Bird, *Financing Canadian Government: A Quantitative Overview* (Toronto: Canadian Tax Foundation, 1979), pp. 42–44.

In general, however, if Canadians do feel overburdened, their reaction is likely to be insidious and difficult to recognize. "Taxpayer insurgency" is probably a better phrase than "taxpayer revolt" to describe what is actually happening. Without an open confrontation between citizen groups and government, rising underground activity is a proxy for revolt.

Statistics Canada prides itself on catching the informal economy on either the income or the expenditure side of the NIEA. It seems likely, however, that many people are able to hide both earning and spending activities. The emergence of a large and growing positive statistical discrepancy on the expenditure side of the GDP estimates is a visible indication of Statistics Canada's inability to account for a growing proportion of economic activity. Another indication of the growing informal economy is the growth in the use of large denomination bills.[21] With the increasing use of credit cards for payment of most transactions, it is hard to explain the popularity of high-denomination bills other than for underground business deals.

Conclusion

If citizens cannot reach a consensus about modifying the present menu of government programs and expecting new ones, they will have to face a heavier tax burden. Both levels of government will need to increase revenue, not only to cover expenditure over the business cycle but also to pay down part of the outstanding debt.

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[20] Although the GST was a replacement for another tax, rather than an increase in taxation, it was widely perceived as a means of increasing the tax burden.

[21] From 1983 to 1989, the annual average compound rates of growth were 11 percent for hundred-dollar bills, 17.3 percent for thousand-dollar bills, but only 7.7 percent for all currency. For a discussion of large bills and the underground economy, see Rolf Mirus, "The Invisible Economy: Its Dimensions and Implications," in George Lermer, ed., *Probing Leviathan: An Investigation of Government in the Economy* (Vancouver: Fraser Institute, 1984), p. 119.

Such action is necessary if governments in Canada are to be more fiscally prudent. Without a strong social contract, however, further rises in the rate of overall taxation are likely to cause more and more individuals to act to reduce their own tax liabilities — to the point where tax increases eventually become self-defeating.

In 1989, taxes and other levies had reached about 35 percent of GDP. Although it is difficult to determine what proportion of taxpayers already find their burdens insupportable, more and more governments felt it necessary in the 1980s to devise ways of mitigating the burden of taxes on low-income people. But since the present level of taxation does not cover total public expenditure, it is likely that taxes and levies will become more onerous. Yet, as the revenue raised by each increase diminishes, governments will certainly find it harder to protect the working poor.

Two factors will be at work. The first is the probability that a taxes-to-GDP ratio approaching 40 percent will discourage firms from starting up or expanding and will cause some individuals to reduce their work effort and others to shift some consumption to neighboring, lower-tax jurisdictions. Second, high effective and marginal tax rates encourage the substitution of nontaxable activities, such as barter and under-the-table dealings, for taxable activities.

Too high a level of taxation will have negative impacts on the growth prospects of any economy. Even countries — such as Sweden — in which there has been broad-based support for strong government intervention in the economy and very heavy taxation are now showing signs of being crushed beneath the burden.

Instead of competing with each other for tax room, federal and provincial governments need to look together at the total spending that is presently underfinanced and cooperatively plan to restrain the growth of expenditure. They must also reassess the allocation of both spending and revenue-raising responsibilities. Finally, the present ratio of revenue to GDP should be acknowledged as a long-term ceiling by both levels of government.

In order for the total deficit to be reduced to the point at which the debt-to-GDP ratio is actually declining, new spending plans will have to be put on hold indefinitely, while some existing programs are phased out or made less generous. Failure to move decisively to check the growth of taxation now will risk hitting the flash point of cynicism about the fiscal system and jeopardizing even those spending areas best left to governments.

4 Profiles of the Provinces

It is necessary to look beyond the developments of aggregate expenditure and revenue in the provincial, local, and hospital (PLH) sector to the performance of individual provinces, highlighting trends that do not conform to the average and identifying some of the pressures that have influenced the differing fiscal developments.

Huge geographic, social, and economic differences within the Canadian federation have caused much difficulty for federal fiscal policy and federal-provincial financial harmony. In particular some provinces' dependence on one or two natural resources and the enormous discrepancy in wealth between the Atlantic provinces and Ontario, British Columbia, and Alberta has put considerable strain on the fabric of Confederation and the nation's finances.

The federal government continues to funnel huge sums to all the provinces for many objectives, particularly raising per capita incomes in the "have-not" provinces. The degree of success is unclear. Disparities in income have generally been reduced over the past two decades, and in the 1980s the gains were quite substantial in the Atlantic region. Yet much of the improvement in relative incomes there can be explained by comparative economic developments. Like the central region, most of the Atlantic provinces enjoyed relatively strong growth after the 1981–82 recession. At the same time, the relative positions of the three western provinces worsened as they had to deal with a series of resource-related setbacks that were in sharp contrast to the boom times promoted by commodity developments in the 1970s.

In spite of the narrowing of the income gap, provincial governments in Atlantic Canada still depend heavily on federal transfers to provide a level of services similar to that of the more-advantaged provinces. Moreover, transfers have not prevented these provinces from racking up sizable burdens. The expenditure of the less-advantaged provinces has been influenced by offers of cost-sharing by the federal government, by national standards in some programs, and by informal standards set by better-off provinces. Thus, in the late 1980s, each of the Atlantic provinces was spending about the same amount per person as Ontario in spite of the difference in fiscal capacity and balance-sheet health. To a lesser extent, Quebec and Manitoba have been subject to the same pressures, and both have built up onerous debt burdens.

Transfers to persons and business have been an important component of the rise in ratios of expenditure to GDP that took place in the 1960s and 1970s. Transfers per capita increased significantly in Quebec, Saskatchewan, and Alberta, approaching the high level of Newfoundland by 1989.

A long-term contribution to rising expenditure-to-GDP ratios has been made by cost increases that were larger in the public sector than the private sector for almost four decades, largely because of differentials in wage-rate increases. Prince Edward Island, Saskatchewan, and Alberta had the largest relative increases in government "prices" over the past two decades.

The provinces differ not only in fiscal capacity but also in the way they raise revenue. The Atlantic provinces rely more heavily on commodity taxes than the rest of the country, which, in turn, depends more on property taxes. The western provinces have nonrenewable resource revenue to mitigate the direct tax burden. Provincial and local governments in Ontario levied the most taxes per capita in 1989. These *variations can be sustained only where there is no great risk of a loss of economic activity to a lower taxing jurisdiction. To a great extent, therefore, there is a strong push toward fiscal harmonization among the provinces.*

* * * *

Canada's ten provinces have little in common. There are huge disparities in land area, geography, population size and density, natural resource endowments, per capita incomes, and educational levels. These differences result in variations in economic strength that affect the demand for expenditure by governments as well as the ability of those governments to raise the revenue necessary to finance levels of public services that are reasonably comparable across the country.

Evaluating Provincial Economies

Several sources of disparity are worth remembering in evaluating provincial economies.

- A province with a well-diversified industrial base is more likely than others to have a stable income and relatively stable own-source revenue and expenditure. For example, both Quebec and Ontario have a strong secondary-industry base and their primary-industry base has relatively minor weight in their GDP; both have enjoyed relatively stable economic growth.
- Dependence on volatile resource sectors is another source of variation among the provinces. Although deposits of exploitable minerals, the presence of prime agricultural land or accessible forests, and access to fishing grounds have the potential of increasing the incomes of residents, such assets can be a mixed blessing for two reasons. First, it has often been too easy for

shareholders and employees to obtain a quick, high return from the sale of raw or semiprocessed material, rather than invest in fixed and human capital for longer-term benefit from the higher value-added of finished goods. It is also typical for governments to make short-term taxation and expenditure policies. Thus, for example, we have provincial government forestry policies that discourage sustainable development.[1] Second, Canadian production is not large enough to influence the world price of most commodities. Since such prices are quite volatile, the provinces with large natural resource sectors will have incomes less stable than the national average, so their revenue is relatively unreliable. Furthermore, the pressure to come to the rescue of resource producers during bad times can create havoc with a province's budget.[2]

- The governments of a number of provinces, particularly those with large resource sectors, have frequently employed industrial policies, either alone or in conjunction with the federal government, in an effort to increase the diversity of their economies. Unfortunately, many of the projects have been of doubtful efficiency or downright misguided.[3]

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[1] Even in the 1976 creation of the Alberta Heritage Savings Trust Fund, the government could not bring itself to go the full distance and invest the full amount of its resource revenue. See Roger S. Smith, "Alberta," in Melville McMillan, ed., *Provincial Public Finances*, vol. 1, *Provincial Surveys* (Toronto: Canadian Tax Foundation, 1991). In addition, the choice of investments became an instrument of public policy, rather than a means of pursuing economic efficiency to preserve the capital value of the assets for Albertans while generating a fair return.

Similarly, in 1974 Saskatchewan established its Energy and Resource Development Fund not as a recognition of the need to replace the value of oil with a financial asset that would then yield revenue but as a source of funds in times of need. On April 1, 1978, the accumulated deposits were transferred to the Saskatchewan Heritage Fund, which was introduced to extend the same principle to a portion of nonrenewable resource revenue from potash and uranium. See Saskatchewan, Budget Speech, March 7, 1978, p. 74.

[2] As Saskatchewan has found out in dealing with its farmers.

[3] Examples that immediately come to mind are, in Nova Scotia, the Sydney Steel Corporation; in Newfoundland, the Labrador Linerboard scheme and the Come-By-Chance oil refinery; and in Manitoba, Flyer Industries and the resumption of the Nelson River power project in advance of firm demand for most of the capacity. Even provinces with well-diversified economies have not been immune from supporting inefficient operations; consider, for example, Varity Corporation and Minaki Lodge in Ontario.

- Within provincial GDPs, there are sizable variations in the weight of goods and services produced by the provincial-local-hospital (PLH) level of government — that is, primary and secondary education, hospital, and welfare services as well as the usual municipal services. The figure ranges from 10 percent to more than 20 percent of GDP, being largest in the east and declining as one goes west but leap-frogging Ontario, where it is the same size as in British Columbia.[4] There is, as discussed in Chapter 2, a body of evidence suggesting that the public sector uses resources less efficiently than the private sector. Having a relatively large share of GDP go to government-produced goods and services implies relatively poor potential for economic growth.
- Some provinces have to work against obstacles of location. In contrast, one of the reasons for Ontario's successful manufacturing sector has been its proximity to the industrial triangle in the United States.[5]

Regional Variations in Economic Structure

The distribution of natural endowments, variations in geographical location in relation to the rest of Canada and to the United States, and historical developments have left the provinces with markedly different economic structures. The four Atlantic provinces stand out as being particularly disadvantaged, with Newfoundland and Prince Edward Island in the worst positions. At the other end of the scale, Ontario is economically better off than all the other provinces by a wide margin, particularly because of its proximity to the industrial United States. Alberta, with its rich oil and gas deposits, is also in

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[4] Statistics Canada does not give information on the share of provincial GDP produced by the federal government.

[5] One set of barriers has, however, begun to crumble with the implementation of the Canada-U.S. Free Trade Agreement, perhaps giving the Atlantic and western provinces a better chance to expand their manufacturing sectors. Furthermore, as production becomes more information-intensive, location will become a less important factor.

Structural Differences in Resource Dependence

Revenue instability creates a fiscal management challenge for Alberta but a budgetary problem for Newfoundland. The reason for this is the big difference in the resource dependence of governments in the east and the west — that is, in the size of the economic rents generated. The cost of production of "old" oil and natural gas in Alberta is low relative to frontier production in Hibernia, for example. Thus, the oil price shocks of the 1970s gave rise to huge rents in the oil and gas sector in the west, of which the governments were able to appropriate a large share for some years. The rents produced by the eastern fishery have been modest in comparison, and governments have generally not taken a share. Thus, as the Economic Council of Canada notes:

> Despite its substantial endowment of iron ore, base metals, forests, and hydro-electric potential, Newfoundland collects more money from taxing tobacco than minerals and more from registering deeds than from forest revenue. These losses are dwarfed by the revenue forgone on the Churchill Falls hydro-electric project.[*]

Of the four primary sectors in Canada — mining, forestry, agriculture, and fisheries — only in the last has the Atlantic region's share of value-added increased in the past two decades. In the other three, its share has decreased steadily.[**]

[*] Economic Council of Canada, *Newfoundland: From Dependency to Self-Reliance* (Ottawa: Supply and Services Canada, 1980), p. 36.

[**] Donald J. Savoie, *Regional Economic Development* (Toronto: University of Toronto Press, 1986), pp. 142–145.

an advantageous economic position, regardless of what short-run setbacks it encounters.

Such setbacks can be economically important, however. Volatile economies make budget planning difficult, and when there is a protracted weakness in a commodity market, the impact on a province's finances can be disastrous. Ontario and to a less extent Quebec have quite stable economies, while Alberta has the most volatile.[6]

Among the many other differences reflected in the snapshots presented in this chapter are the following facts. The Atlantic provinces have the smallest land areas, population, and GDP, while the two central provinces have the largest of each. The Atlantic provinces are the least urbanized. The western provinces have a lower level of population density than the other two regions — although Newfoundland has the lowest in the country because Labrador is part of the province's territory.[7]

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[6] In the 1960s and most of the 1970s, Saskatchewan's volatility far exceeded Alberta's, but the former has been reduced dramatically during the past decade or so.

Six of the seven "have-not" provinces (Quebec is the exception) have shares of GDP and employment below 5 percent. The shares of the Atlantic provinces are so small that, combined, they do not even equal Manitoba's and Saskatchewan's together and are considerably less than Alberta's. However, the Atlantic provinces' share of unemployment was over 12 percent in the 1987–89 period, compared with 7 percent for Manitoba and Saskatchewan and 10 percent for Alberta. The two central provinces together account for over 60 percent of real GDP and employment.

Although real GDP growth in the three Maritime provinces averaged roughly the same as Ontario's between 1979 and 1989, there was only a small improvement in their relative position (Prince Edward Island's was slightly worse), while Ontario made an impressive advance in all three measures. By contrast, Quebec's shares of real GDP and employment fell slightly and although its unemployment share fell a lot, it was less than Ontario's. The biggest losers between 1979–81 and 1987–89 were Alberta and British Columbia (see Table 4.1).

Since the mid-1970s, four "have-not" provinces — Newfoundland, Prince Edward Island, Manitoba, and Saskatchewan — have also had the highest dependency ratios (defined here as the ratio of the population aged 0–17 and 65+ over the population aged 18–65). Although Quebec — a "have-not" province — has had the lowest

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[7] In themselves, these differences should not be detrimental to provincial governments' finances. For example, the Maritime provinces, though less wealthy than Ontario and Quebec, need to spend relatively less on transportation and communication because they have smaller geographical areas and lower population densities. On the other hand, provinces with both a large share of the population and a large percentage of people living in metropolitan agglomerations can achieve significant economies of scale in the provision of urban infrastructure and services.

Table 4.1 *Indicators of Provincial Economic Performance, 1979–89*

	Real GDP			Employment			Unemployment		
	1979–81	1987–89	1979–89	1979–81	1987–89	1979–89	1979–81	1987–89	1979–89
	(percentage share)		*average % change)*	*(percentage share)*		*average % change)*	*(percentage share)*		*average % change)*
Newfoundland	1.4	1.4	3.3	1.6	1.6	2.0	3.3	3.6	2.3
Prince Edward Island	0.3	0.3	4.0	0.4	0.4	1.7	0.7	0.8	5.8
Nova Scotia	2.3	2.5	4.1	3.0	3.0	1.9	4.1	4.1	1.7
New Brunswick	1.9	2.0	4.2	2.3	2.3	1.8	3.6	3.8	2.1
Quebec	23.5	23.2	3.1	25.0	24.5	1.7	34.1	29.9	0.6
Ontario	36.6	40.0	4.2	38.1	39.6	2.4	33.4	25.8	0.2
Manitoba	3.7	3.7	3.1	4.3	4.1	1.2	3.1	3.8	3.7
Saskatchewan	3.9	3.4	1.7	3.9	3.7	1.0	2.2	3.4	6.1
Alberta	13.7	11.3	2.8	10.1	9.7	2.4	5.0	10.0	10.4
British Columbia	12.0	11.8	3.7	11.3	11.2	2.5	10.5	14.9	5.7
Canada	*100.0*	*100.0*	*3.2*	*100.0*	*100.0*	*2.1*	*100.0*	*100.0*	*2.0*

Note: GDP is average at factor cost, deflated by the implicit price deflator for final domestic demand.

Sources: Author's calculations, using data from Statistics Canada, *Historical Labour Force Statistics*; and idem, *Provincial Economic Accounts*.

dependency ratio, those of Ontario and Alberta have been close behind.

(For the data on shares of GDP by sector used in this section, see Table A.10 in Appendix A.)

The Atlantic Provinces

All four Atlantic provinces are "have-not" provinces, but the structures of their economies differ considerably. The relatively greater importance of the primary sector in Newfoundland and Prince Edward Island, the two weakest provinces in the country, causes greater volatility in their income and government revenue; they also have much smaller manufacturing sectors than New Brunswick and Nova Scotia. Although the Atlantic region depends less on primary production than the western provinces, much of its secondary production is integrated with primary industry. Services-producing industries account for a larger share of GDP than they do in the rest of the country, but a large proportion of services is produced by the PLH sector.

For the region as a whole, dependence on primary industries did not change materially between the early 1970s and the mid-1980s, but the manufacturing share of GDP declined in all four provinces. Unlike the case in the rest of the country, the increasing relative importance of services-producing industries came entirely from growth in PLH-sector services.

Per capita incomes are considerably higher in Nova Scotia and New Brunswick than in Newfoundland and Prince Edward Island. Over the 1970–89 period, Nova Scotia held the lead in the region and increased it against New Brunswick in terms of earned income per capita.

For all but one of the past 25 years, the unemployment rate in the Atlantic region has been higher than the national average and the differential has increased dramatically — from 1.5 to 4.8 percentage points, starting about 1973. Newfoundland's unemployment rate was higher than the Atlantic average in all of those years, and that differential began to worsen after 1972. Although Newfoundland's shares of real GDP and employment are higher than those of Nova Scotia or New Brunswick, its share of unemployment is almost as large.

All four provinces have continuously been equalization recipients, and Newfoundland is clearly the worst off. Even its geography is against it, with its most populated area cut off from the mainland. The whole region has a tremendous disadvantage in trying to get a larger share of markets in the rest of Canada as well as in the United States. In Newfoundland's case, although the development of the Hibernia project will eventually benefit the province, its problems are still enormous.[8]

Ontario and Quebec

The primary sector has a relatively small weight in the economies of Quebec and Ontario, and both provinces have a similar dependence on the goods-producing and services-producing sectors, although manufacturing plays a greater role in Ontario. Both provinces' goods-producing industries experienced a reduction in their share of GDP after the early 1970s. The corresponding increase in importance of the services-producing industries was concentrated in non-PLH-provided services.

In terms of per capita real GDP and earned income, Ontario is considerably better off than Quebec, but the gap has narrowed substantially over the past two decades. On the other hand, to the extent that the unemployment rate is an indication of demand for general welfare assistance (GWA), Quebec's consistently higher unemployment rate also points to relatively higher demand for social expenditures. Although the differential between Quebec's unemployment rate and the national rate had widened to 1.8 percentage points in 1989 from 0.7 in 1966, the deviation from Ontario's had gradually increased from 1.5 to 4.2 percentage points. More significant in terms of ability to support a high unemployment rate, however, is the fact that Ontario's share of national unemployment is much smaller than its shares of GDP and employment, while the reverse is true for Quebec.

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[8] For example, Newfoundland has been unable to exploit the electricity-generating potential of the Lower Churchill River because of the politics of obtaining an economically viable means of transmitting the output to users within and without the province.

The Western Provinces

The economies of the four western provinces show considerable variation. Although the primary sector is an important component of all four, it is much smaller in British Columbia and Manitoba than in Alberta and Saskatchewan. However, much of British Columbia's secondary industry is directly linked to its primary industries -- for example, pulp and paper— and agriculture can still have a sizable impact on the Manitoba economy, as it did in 1988. Alberta's oil and gas sector has helped to make that province the richest in the country in terms of per capita real GDP — even after the energy sector's weak period. In contrast, the vicissitudes of Saskatchewan's large agricultural sector have kept the province in sixth place for more than a quarter of a century, in spite of its relatively important oil and gas sector, and periodically made it a recipient of equalization.

British Columbia and Manitoba, which have fairly similar weights for the broad categories of production, have more diversified economies than the other two western provinces. This greater diversity has led to relatively greater stability in economic growth. Yet Manitoba's lower per capita earned income and real GDP have made it a "have-not" province, while British Columbia has always been a "have" province.

The goods-producing sector of all the western provinces except Alberta declined between 1971 and the mid-1980s, but only in Saskatchewan was the primary sector entirely responsible. In all four provinces — especially British Columbia — the share of manufacturing in GDP shrank. The substantial increase in Alberta's oil and gas sector caused its goods-producing share to rise.

By a GDP per capita measure, Manitoba and Saskatchewan were consistently worse off than their more westerly neighbors. In 1960, in fact, Saskatchewan's real GDP per capita was much lower than Manitoba's. Between the mid-1970s and 1981, however, GDP per capita rose dramatically in the three most western provinces (before retreating in the 1980s). This development gave Saskatchewan a temporary advantage over Manitoba, and by 1989 its per capita real GDP was significantly closer to Manitoba's than it had been two decades earlier. British Columbia was still in second place, enjoying the same relative advantage nationally that it had in 1970, while Alberta's advantage was even larger than it was then. British Columbia invariably has had the highest unemployment rate of the four western provinces as well as a rate higher than the national average. Until the 1981–82 recession, there was not much difference among the other three western provinces, after which Alberta's unemployment rate moved 2 or 3 percentage points above Saskatchewan's and Manitoba's for five years.

Variations in Economic Performance

In the 1960s, real economic growth was very similar across the country.[9] In the 1970s, however, the resource boom generated a major acceleration in the economies of Saskatchewan, Alberta, and British Columbia, while growth slowed in Quebec, Ontario, and Manitoba, and uncertain times led to very uneven performances in the Atlantic region. The 1980s began with a short downturn, which hit harder in the Atlantic provinces and Manitoba than in the rest of the country and left all the economies from Manitoba east with virtually no growth. These provinces then weathered the subsequent recession and recovery reasonably well. Although employment dropped in the whole Atlantic region during the recession, only in Prince Edward Island did real GDP decline noticeably. Both Ontario and Quebec underwent a sharp contraction in employment and real GDP, but it lasted only about a year. In the western provinces, real GDP either fell or stagnated in both 1982 and 1983, and in Alberta and British Columbia, employment also fell for two years. The years following the recession were equally varied, with two provinces going through a second recession.

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[9] With the notable exception of Saskatchewan, which was subject to violent swings in its dominating agricultural sector.

Indeed, perhaps the easiest way to describe the economic paths of the provinces in the 1980s is to classify them in three groups according to their performance since the 1981–82 recession, using both real GDP and employment growth to discern the trends (see Figure A.1).[10]

Fast Recovery:
Prince Edward Island, Nova Scotia, Ontario

Prince Edward Island, Nova Scotia and Ontario made up their real GDP declines the year following the recession and recovered their average 1979–81 level of employment as early as 1983 and their prerecession peak levels by 1983 or 1984. Ontario outperformed the Canadian average GDP and employment growth throughout the 1980s.

Although Prince Edward Island had a small drop in real GDP in 1985, its overall economic and employment growth were better than average. A remarkable rebound in employment in 1983 appears to have been caused by the transfer of the federal Department of Veterans' Affairs to Charlottetown, which took place between 1979 and 1985.

Nova Scotia's real growth was better than the national average in the first seven years of the 1980s but somewhat lower in the last three years. Its employment developments were similar to the national average until 1987, when it pulled slightly ahead.

In spite of strong employment growth in all three of these provinces, their unemployment rates were discouraging. They remained above the 1979–81 average in Ontario until 1987 and in Nova Scotia until 1989; Prince Edward Island's rate was still much higher in 1989 and has risen since.

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[10] Employment performance is a more accurate indicator of individual benefits from economic growth than real GDP per capita.

Slower Recovery: Newfoundland, New Brunswick, Quebec, Manitoba

After the recession, Newfoundland, New Brunswick, Quebec, and Manitoba did not do quite as well as the "fast recovery" group. The two Atlantic provinces made up the decline in GDP in 1983, but employment recovery was more sluggish, particularly in Newfoundland, which did not regain its 1979–81 average until 1985. Quebec's employment turnaround was about the same as New Brunswick's but its GDP took longer to recover. Employment growth was strong in all three eastern provinces in the three years to 1989.

Like the Atlantic provinces, Manitoba suffered relatively little during the recession. A temporary burst of interprovincial immigration helped to accelerate the recovery, but although employment bounced back very quickly, recovery in GDP took longer. Growth during the expansion was initially better than average; in the last few years of the decade, however, Manitoba was pulled down by its agricultural sector, and employment began to fall significantly behind the national average.

Quebec's unemployment fell below its 1979–81 average in 1988, but the rate in the other three provinces never achieved the level of those earlier years.

Prolonged Recession: Saskatchewan, Alberta, British Columbia

For various reasons, Saskatchewan, Alberta, and British Columbia took longer than all the other provinces to recover from the 1981–82 recession. Saskatchewan's real GDP fell more than the others' in 1982 and continued to fall in 1983. Its employment level, however, merely stagnated in 1982 and then rose until 1986. Both Alberta and British Columbia had negligible gains in GDP in 1983, and both had an employment cycle that did not end until 1986. Expenditure related to Expo '86 affected the pattern of economic activity in British Columbia. Alberta had had sharp gains in employment in the three years before the recession, and it never dropped below the average of those years during the 1980s; however, the prerecession peak level was not regained until 1987.

Oil price declines in early 1986 affected all three of the most western provinces, and Saskatchewan also had to contend with a grain price collapse and other agricultural disasters. British Columbia suffered a reduction in the growth rate of real GDP growth in 1986, but Saskatchewan and Alberta endured an absolute GDP drop. During 1987, British Columbia's economy regained its previous momentum, and the province experienced strong growth in 1988 and 1989. Alberta's real GDP, on the other hand, did not begin to recover from the setback until 1988, and Saskatchewan's rose only in 1989.[11]

British Columbia's employment grew vigorously in the second half of the 1980s, surpassing the national average in 1989. After 1987, net migration to that province turned to a strong inflow (from an outflow that had lasted since 1983). To some extent, this migration must be held responsible for the fact that the province's unemployment rate remained stubbornly high in the face of the fastest growth in employment in the country; it began to approach the 1979–81 average only in early 1990.[12]

Alberta's employment grew quite strongly in 1988 and 1989; although its unemployment rate then declined steadily to mid-1990, it was still well above the prerecession levels. It is less surprising to find the same development in the unemployment rate in Saskatchewan, where employment continues to be sluggish. In Alberta's case, strong net-migration inflows have played a part.

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[11] Saskatchewan's and Alberta's employment developments are not well correlated with their real GDP performances because resource production, which does not generate a great deal of employment, has such a large weight in their GDPs.

[12] Cutt, however, detects the presence of a structural problem in the numbers of long-term unemployed. See James Cutt, "British Columbia," in McMillan, ed., *Provincial Public Finances*, vol. 1, *Provincial Surveys*, p. 287.

Summary

Since the 1970s, commodity cycles have caused the economies of resource-dependent provinces — primarily Alberta, British Columbia, and Saskatchewan — to differ markedly from the economies of those provinces that have a substantial share of their GDP in secondary production.

The western provinces took longer to recover after the 1981–82 recession. Then the 1986 oil price collapse and a series of problems in agriculture were especially hard on Alberta and Saskatchewan, sending them into or close to recession, while Nova Scotia, New Brunswick, Quebec, and Ontario continued to make strong advances. As the 1980s drew to a close, however, those provinces showed signs of running out of steam. Meanwhile, British Columbia's economy received a boost from a strengthening of pertinent commodity markets and related growth in fixed investment, and Alberta and Saskatchewan began to recover. Employment in Saskatchewan and Manitoba remained in the doldrums, although the latter province continued to grow moderately.

In brief, developments of the past 15 years or more have illustrated that, at any one time, strength in some parts of Canada's diversified economy can counterbalance weakness in others. The complementarity of the regions is evident again in the present recession. With manufacturing being hit simultaneously by high real interest rates, a strong dollar, and structural adjustments to increased global competition, Ontario succumbed to recession first in early 1990, followed quickly by Quebec and then Manitoba. But Alberta and British Columbia had still shown no signs of entering a decline by the end of 1990; indeed, their employment was still increasing at a respectable pace. Nova Scotia and, to a much lesser degree, New Brunswick were also expanding throughout 1990. These four provinces were joined by Newfoundland, basking in the initial spinoffs of Hibernia. Neither growing nor collapsing during 1990 were the economies of Prince Edward Island and Saskatchewan.

Income Disparities

The provinces' deep disparities in their ability to generate wealth play a key role in their ability to raise revenue and, therefore, to provide their citizens with a basket of services that is not too different from the national average. Federal efforts to increase incomes in disadvantaged regions are, therefore, important to provincial politicians not only because they have the well-being of their citizens at heart but also because such efforts have a direct impact on the provinces' finances by increasing their governments' fiscal capacity. All income programs do not, however, affect the governments' finances equally. Income-support programs have an immediate positive effect on the level of income or spending that the provincial government taxes. In contrast, programs aimed at strengthening a region's economic structure may not increase the tax base for a long time, if at all, and may worsen a provincial government's financial situation in the short run if it is required to match the federal government's spending.

It is difficult to know how to analyze income programs because there are such a multitude and their goals are not clearcut. This section explains some of the confusion and then gives an overview of provincial income disparities by several measures.

Income Disparities: Problems, Programs, and Policies

Finding one's way through the maze of income policies and statistics requires keeping a firm grasp on two facts: there are two types of disparities — between individuals and between provinces or regions[13] — and two types of programs — income support and income generation. (In theory, these four factors could fall into neat pairs, but they do not do so in reality.) The federal government's equalization program is an example of an income-support program. Income-generation programs are supposed to reduce overall income disparities by encouraging regional development through subsidies for public infrastructure and incentives for business development.

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[13] Another type of income disparity is intraprovincial, which is extremely severe in some provinces, even those that on average are "advantaged". There is no uniform provincial program for ameliorating these inequalities, but individual provinces have employed a number of different methods, including the decentralization of government operations. For example, Ontario moved its Department of Natural Resources from Toronto northwest to Thunder Bay.

Income-Support Programs

Among the array of federal and provincial income-support programs, those that actually affect regional income distribution are few. Equalization and unemployment insurance (UI), for example, are supposed to alleviate income disparities through redistribution[14] (by means of transfers to, respectively, governments and individuals). There is, however, no direct redistribution from one region to another — and only partial redistribution as long as the federal government is in deficit.

On the tax side, the progressive nature of the personal income tax (PIT) tends to weigh less heavily on low-income provinces but at the same time translates into lower value in those same provinces when the federal government substitutes tax points for cash transfers.[15] The cost-sharing of the Canada Assistance Plan (CAP) does not operate in favor of low-income provinces. Although they have a higher-than-average percentage of welfare recipients, only half the cost of payment is borne by the federal government; since the amount of that share depends on how generous they can afford to be, the less-advantaged the province, the less likely that the program will do anything to reduce income disparities.

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[14] The confusion of purpose and type of program is evident even in these basic Canadian programs. Although the constitutional description of the purpose of equalization suggests that it is to provide a minimum level of income to the governments of the disadvantaged provinces, the operation of the program is clearly aimed at reducing income disparities among regions. As for UI, the use of a formula that takes account of regional differences in unemployment means the program provides not simply income support for individuals but also a type of regional assistance.

[15] This problem was addressed when the federal government changed the operation of Established Programs Financing (EPF) to a partial transfer of tax room and an unconditional block grant by building in an additional equalization for the tax points.

Income-Generating Programs

Income-generating policies, which aim to reduce overall income disparity by fostering self-reliance through regional development, involve direct transfers of funds, as well as loans and tax incentives. Over the years, federal programs have been developed and administered by a variety of departments, such as Regional Economic Expansion and its successor, Regional Industrial Expansion. Payments may be made to the provincial governments as part of a cost-sharing program — for example, for highway construction — or directly to business. Other spending that has been prompted more by concerns for regional development than other policy goals includes subsidies for energy exploration and development.

Because of the multitude of ways that Ottawa uses its financial clout to influence the regional economies, it is impossible to arrive at a dollar tally for each province or region. Nonetheless, it is interesting to observe the way in which some of the more easily monitored expenditures are dispersed across the country.

Table 4.2 shows the distribution of transfers during the 1984–88 period to provincial governments under various regional programs, as well as subsidies and capital assistance to the business sector. Not unexpectedly, government-to-government transfers, calculated per capita, were largest for two problem regions — the Atlantic provinces plus Manitoba and Saskatchewan. Quebec, the other "have-not" province, received considerably less than its population share. When transfers to business are included, however, the allocation is altered dramatically, and the shares move closer to the population distribution. Nevertheless, Manitoba and Saskatchewan combined still received a hugely disproportionate amount (29 percent of the total compared with 8 percent of the population), and even Alberta and British Columbia — two advantaged provinces — received somewhat more than their population share. Quebec's

Table 4.2: ***Selected Federal Expenditures Allocated to Regions, 1984–88***

	Regional Expansion and Crop Insurance[a]	Transfers to Business[a]	Total Transfers	Current Goods and Services[b]	Total	Population[c]
	(percentage of all-Canada total)					
Atlantic provinces	23.0	11.6	12.0	15.5	14.4	10
Quebec	16.1	19.0	18.9	19.7	19.4	25
Ontario	7.8	16.9	18.5	38.4	32.3	36
Manitoba/ Saskatchewan	30.8	22.1	22.4	7.6	12.1	8
Alberta/ British Columbia	21.0	23.0	22.9	17.5	19.1	21
Yukon/Northwest Territories	1.2	5.4	5.3	1.4	2.6	[d]

[a] Deflated by the provincial implicit price deflator for final domestic demand.

[b] Deflated by provincial implicit price deflators for this category.

[c] 1988 estimates.

[d] Less than 1 percent.

Source: Statistics Canada, *Provincial Economic Accounts*.

allotment was still well below its population share; so were the Atlantic provinces' and Ontario's.[16]

Since the federal government has considerable leeway in where to locate Canadian Forces bases, prisons, and administrative offices, it is also pertinent to examine the geographical distribution of its consumption spending, much of which is for defense and the civil service. For the 1984–88 period, the two most western provinces and Quebec were "underweighted," while the Atlantic region and — surprisingly — Ontario were "overweighted."[17]

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[16] These averages do, however, conceal important regional changes over the years. The Atlantic region's share of transfers began higher but dropped below its population share with the ending of the National Energy Program. The Manitoba-Saskatchewan allocation went up because of increasing subsidies to agriculture in Saskatchewan.

[17] These weights had hardly changed from 1978. Ontario's had declined by 1 percentage point and Quebec's had risen by the same amount.

Goals and Achieving Them

Canadian governments have not articulated one overall goal for their numerous income-support and income-generating programs (as noted in Chapter 2). It is, therefore, difficult to evaluate the success of the efforts to redistribute income. Should individual provincial per capita levels be compared with some minimum level or with that of the wealthiest province or with some average? Some income-support programs — GWA, UI, and the guaranteed income supplement (GIS) — aim to provide a floor for disadvantaged individuals, but the floor varies with the program. A number of other programs, including family allowances and the federal old age pension, are now partially concerned with the recipient's other resources. Still others — such as workers' compensation, payments such as grants to native peoples and one-time compensatory payments to Canadians of Japanese descent, and research grants — are not related to income level at all. The failure of the federal and provincial governments to develop a comprehensive guaranteed annual income — for example, through a negative income tax mechanism — must be explained by this multiplicity of objectives as well as by a reluctance to define minimum levels of income and to use income tests.

Regional development programs too have not been designed exclusively with the aim of reducing income variations. Indeed, many have been criticized for being unable to affect the growth of employment permanently.

The elimination of all income disparities across the country would be virtually impossible to achieve, even if doing so were realistic from a cost point of view. On the other hand, governments do not seem to have adopted the goal of an absolute improvement in per capita incomes — which might not change the relative incomes of individuals or regions.

Trends in Income Disparities

In spite of the ambiguity surrounding the overall goal of income-raising government programs, a great deal of regional analysis

Transfers to Atlantic Canada

The Atlantic region, being so disadvantaged for so long, has been the object of much analysis about the value of government intervention to raise the standard of living. It is outside the scope of this study to review or evaluate that work, but some gleanings provide food for thought.

The largest source of federal transfers to the Atlantic provinces is the equalization program, followed by UI benefits. Old age security payments exceed the UI net inflow. Transfers to the Atlantic provincial governments for regional development and to business are also significant, being equal to about 60 percent of net UI payments to the region in 1988. Financial assistance also comes from the federal government in many other forms, such as direct loans to industry, shares in the cost of infrastructure such as highways and ports, and expenditure on federal goods and services. As noted in the text, Atlantic Canada appears to benefit more from the last expenditure than from transfers for regional development. The success of all the incentives and development programs is hard to measure, but it appears to have been very modest. In its submission to the Royal Commission on the Economic Union and Development Prospects for Canada, the Atlantic Provinces Economic Council noted:

> To the extent that the development of the economy can be linked to these policies, the results can be said to be less than fully satisfactory. At best, the results are mixed and it is difficult to argue that we have in any way "caught up" with the rest of Canada.*

Much of the regional development effort appears to have been concentrated on programs that would increase the demand for labor in the area, rather than on enhancing investment in human capital. For example, the federal government has belatedly acknowledged that its support for the Hibernia project is really just another expenditure on regional development in Newfoundland, and the project has been criticized for providing few permanent jobs.

* Atlantic Provinces Economic Council, *Atlantic Report*, 84-3: 3.

focuses on data that try to measure income disparities, implying that the success of government income-enhancing programs is judged according to how far the income gap has been narrowed. I have used such an approach in this subsection to draw some conclusions — however fragile — about the effect of the years of government effort to close the income gap in Canada (see Table 4.3).[18]

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[18] In examining data on incomes and economic growth, one must recognize the inadequacy of information. As Savoie, among others, points out, such measures give an incomplete...

From 1970 to 1985, there was a major narrowing of interprovincial disparities in personal income.[19] The reduction was sizable for the five eastern provinces and Saskatchewan, though marginal for Manitoba. In the three long-term "have" provinces, Alberta's income went from less to more than the standard,[20] while Ontario's and British Columbia's fell closer to it. Then, in the second half of the 1980s, three of the "have-not" provinces — Nova Scotia, Manitoba, and Saskatchewan — as well as British Columbia, suffered a reversal, in large part because of problems in resource areas such as energy and grain. Nevertheless, all the "have-not" provinces except Manitoba were closer to the standard in 1989 than in 1970. Part of the improvement resulted not from increases but from the relatively worse positions of British Columbia and Ontario. Part of it also came from rises in the proportion of government transfers in personal income, particularly in the cases of Newfoundland, New Brunswick, and Quebec. In terms of disposable income, however, Quebec's gap was reduced only marginally.

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...picture of an individual's or a region's well-being. A complete survey would supplement with other measures, such as the ratio of doctors to population and literacy levels (see Donald J. Savoie, *Regional Economic Development* [Toronto: University of Toronto Press, 1986], p. 40). The focus on fiscal issues here, however, justifies the use of the narrower measure.

[19] The effect of income support to individuals is easily measurable with the data on personal income per capita since they include government transfers to persons, including UI and old age security payments from the federal government and GWA and workers' compensation benefits from the provincial-local sector. (Unfortunately, the reported data also include provincial support of universities, which likely increases income disparities within a province.)

In terms of provincial governments' financial well-being, personal income per capita approximates the government's PIT base and also gives some idea of the ability of the government to raise other revenue, such as sales taxes, from the personal sector.

[20] The standard used here is a five-province average (excluding Alberta and the Atlantic provinces). The national average is usually used as a benchmark, but there is no good reason to use it as a guide to appropriate income policies. In some periods, oil and gas production has created an inflated level of national averages; by the same token, the collapse in grain or fish prices has deflated it. It is more useful to work with an average of provincial incomes that is more stable than the total and at the same time is not unrealistically high. Since the equalization calculations use a five-province average of fiscal capacity, the income of the same five provinces seems a reasonable standard for examining interprovincial income disparities. The use of a ten-province standard would not, however, materially change the conclusions over the period considered in this book.

Table 4.3: ***Provincial Indexes of Per Capita Income and GDP***

(five-province average = 100)[a]

	Earned Income[b]			Personal Income						Real GDP Per Capita[c]		
				Before tax			After tax					
	1970	1980	1989	1970	1980	1989	1970	1980	1989	1970	1980	1989
Newfoundland	55	58	60	61	66	69	65	69	74	60	58	61
Prince Edward Island	58	61	64	64	68	71	69	71	74	56	56	62
Nova Scotia	71	71	76	73	75	79	74	76	82	68	67	73
New Brunswick	66	65	69	69	70	74	71	72	77	65	67	71
Quebec	86	93	88	87	94	91	88	91	89	88	91	90
Ontario	116	106	115	115	104	111	113	106	111	113	105	109
Manitoba	88	83	80	86	85	85	90	89	89	91	87	89
Saskatchewan	66	80	70	69	85	79	72	88	83	78	98	86
Alberta	95	112	96	94	109	98	94	110	99	110	161	119
British Columbia	103	111	96	104	110	98	104	111	100	102	112	102
Yukon, NWT	116	114	127	103	101	111	100	97	113	148	174	167

[a] The five provinces used for the averages are those used in the equalization formula — namely, Quebec, Ontario, Manitoba, Saskatchewan, and British Columbia.

[b] Wages, salaries, and supplementary income plus unincorporated business income.

[c] GDP at factor cost, deflated by the implicit price deflator for final domestic demand.

Source: author's calculations, using data from Statistics Canada, *Provincial Economic Accounts*.

Earned income is a measure of the self-sufficiency of a province's residents. This measure showed fewer relative improvements in the "have-not" provinces over the period than did personal income. Nevertheless, quite sizable reductions in disparities took place in the 1980s. However, some of this narrowing came from the worsening position of the three western provinces included in the standard. The fall in Manitoba's relative position between 1970 and 1989 that showed up in the personal income is explained by the drop in its residents' earned income. By contrast, almost half of Nova Scotia's relative improvement in personal income was due to its better-than-average growth in earned income.

Real GDP per capita is probably the broadest measure of a province's economic strength and, therefore, its tax base.[21] The four Atlantic provinces were well below the standard in 1989 and significantly worse off than the other three recipients of equalization, Quebec, Manitoba, and Saskatchewan, which had fairly similar per capita GDPs. The disparities of six of the seven recipients were, however, smaller in 1989 than they had been about two decades earlier — although the reduction for Newfoundland was quite small. The most dramatic decline in disparity occurred in Quebec. Once again, Manitoba was relatively worse off than it had been.

By all these measures, it appears that most of the "have-not" provinces, particularly those in Atlantic Canada, narrowed the income gap over the past two decades. Manitoba's relative position, however, worsened. The gap was also narrowed by British Columbia's becoming somewhat worse off. (It is, of course, important not to overlook the absolute gains made by all the provinces over the two decades.)

The various measures present a picture of Ontario as the most-advantaged province. Statistics that are proxies for the demand for government program spending reinforce the image. For example, in 1989 Ontario had more than 41 percent of Canada's GDP but only 36 percent of the population and 26 percent of the unemployed. Alberta is also advantaged; even after the impact of the fall in energy prices, it had 11 percent of GDP but 9 percent of both the population and the unemployed. By the same criteria, the Atlantic region was the most disadvantaged, having about 9 percent of the population and 12.7 percent of the unemployed but only 6 percent of the GDP.

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[21] GDP at factor cost is used in order to eliminate the distortions created by the subsidies to oil importers in the Atlantic provinces, which reduce GDP at market prices. To illustrate the extent of the distortion, the original estimate for Nova Scotia's 1980 GDP growth at market prices was 11.5 percent, but when the subsidies were later deducted, the estimate was reduced to 2 percent. See Nova Scotia, Budget, 1982/83, p. A20.

PLH-Sector Expenditure by Province

Economic performance influences fiscal performance, so there are few surprises in the provincial measures of the latter. Some of the details are interesting, however.

Growth in Expenditure Relative to Provincial GDP

As pointed out over and over again in this book, government expenditure in the aggregate PLH sector rose faster than GDP over the past three decades. There was, however, considerable variation in the growth as well as the size of the PLH sector across the provinces. Given Canada's federal-provincial fiscal arrangements and voters' general expectation that government services not differ significantly across provinces, it is not surprising that during the 1960s, 1970s, and 1980s, Newfoundland and Prince Edward Island, the poorest provinces in Confederation, invariably had the highest expenditure-to-provincial-GDP ratios, and wealthy Ontario the smallest. Saskatchewan and Alberta periodically broke out of this relationship (see Table 4.4). There was also a negative correlation between the levels of per capita income and the expenditure-to-GDP ratios.

During the 1967–71 period, when the major shared-cost social programs were being established or expanded, a rise in the expen-

Table 4.4: ***Expenditure-to-GDP Ratios in the PLH Sector, 1961–89***

	1961	1971	1976	1981	1989
			(percent)		
Newfoundland	21.7	37.1	37.6	36.7	37.2
Prince Edward Island	27.0	36.2	35.6	35.4	33.4
Nova Scotia	17.3	27.8	29.4	34.9	28.4
New Brunswick	19.9	28.4	30.6	30.8	29.0
Quebec	13.4	23.9	26.3	29.2	27.1
Ontario	12.2	19.4	18.9	18.6	18.8
Manitoba	16.5	21.9	24.0	23.4	28.8
Saskatchewan	19.9[a]	21.9	22.0	20.3	30.1
Alberta	16.0	21.5	17.0	18.8	24.7
British Columbia	14.9	18.5	20.2	20.9	20.7
Yukon and Northwest Territories	6.7	35.5	43.5	43.6	38.8
Canada	*13.9*	*21.3*	*21.8*	*22.6*	*23.2*

Note: Expenditures have been adjusted for public service superannuation funds and capital consumption allowances.

[a] 1961 marked a high point; the average for 1961 and 1962 was 18.1 percent.

Source: Author's calculations, using data from Statistics Canada, *Provincial Economic Accounts*.

diture-to-GDP ratio was inevitable.[22] Its growth in the Atlantic provinces and Quebec was considerably larger than in the rest of the country.

The 1972–81 period can be seen as one of consolidation of the social program network at the provincial level, as well as of adjustment to changes in the federal government's support formulas and inflation. Expenditure varied from province to province according to a combination of financial strength, political ideology, and expediency. The Atlantic provinces, except Nova Scotia, restrained their expenditure growth in reaction to the debt they had accumulated in the 1960s. In Ontario, where economic growth had been lackluster in the second half of the 1972–81 decade, expenditure was also restrained, increasing by less than GDP over the whole period. Alberta's expenditure also increased by less than GDP, but that was no great feat, considering the boom it went through. The small increases in Saskatchewan's and British Columbia's expenditure-to-GDP ratios were also due to resource-led growth. Nova Scotia and Quebec increased expenditure at a faster pace than the overall economy.

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[22] I selected the end points of the periods with an eye to avoiding major distortions from economic cycles. Saskatchewan is a special case, however, since its GDP was so volatile in the 1960s.

From 1981 to 1989, most provinces were forced to come to terms with the debt service that was absorbing an increasing share of spending; in some, concerns about a possible tax revolt also rose to the surface. Yet developments were even more diverse than they had been in the previous decade. The Atlantic provinces and Quebec were forced to take drastic action to bring their spending growth below GDP growth; even so, the ratio in Newfoundland was higher in 1989 than it had been in 1981. Ontario and British Columbia achieved the same ratio. In the other western provinces, the ratio ended up higher than it had been in 1981; although weakness in GDP played a role here, it was a minor factor for the period as a whole in Manitoba, which continued a long-term upward trend in expenditure growth relative to GDP. Even for Alberta, where GDP performance did have a substantial influence on the ratio, there is evidence of an upward bias over the long term.

Over the entire 1961–89 period, the Atlantic provinces' ratios remained larger than those of the other provinces, and Newfoundland's broke well away from the Maritimes'. Quebec's ratio moved away from Ontario's, closer to the Maritimes' level. The homogeneity of the four western provinces was shattered by the variation in the effect of and response to resource developments.

Given the pressure to equalize programs and their standards, one might expect expenditure-to-GDP ratios to be negatively correlated with real GDP growth. And that was the case from 1966 to 1989.[23]

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[23] A weaker relationship was also evident in two subperiods: 1966 to 1976 and 1977 to 1989.

Expenditure Per Capita

Ratios of expenditure to GDP, affected as they are by income levels are not very useful in comparing spending levels across the country. For that, per capita expenditure must be used. Given the revenue-raising disadvantages of the "have-not" provinces, it might be expected that their per capita expenditures would tend to be lower than those of the "have" provinces — in other words, that PLH-sector expenditure, which is dominated by the noncyclical demands for health care, education, and municipal services, would be determined by affordability. On the other hand, if one or two provinces become standards-setters of government services for the country or a region, then lower-income provinces would tend to have their expenditure levels pulled up by the benchmark spenders. The data may support the latter hypothesis better than the former because there is no clear relationship between the provinces' income and their expenditure per capita.[24]

There does seem to be a negative relationship between the rate of change in GDP and the rate of change in expenditure per capita when measured over a long period of time. In other words, provinces with the strongest growth have the smallest increases in expenditure-to-GDP ratios but can afford to raise their per capita spending the most. In the presence of the strongest growth in the country for the 1983–88 period, Ontario was able to sustain a strong increase in per capita spending without a rise in its expenditure-to-GDP ratio. (Even though Quebec and Nova Scotia managed declines in their ratios between 1981 and 1988, they were small given their healthy economic growth.) This phenomenon reinforces the view that better-off provinces encourage their less-well-off neighbors to spend at a rate that can cause weaker provinces to get out of their depth.

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[24] Between 1961 and 1975, program expenditure per capita in Newfoundland, Prince Edward Island, and Nova Scotia narrowed or even closed the gap with Ontario. In New Brunswick and Quebec, program expenditure per capita was also lower than in Ontario in 1961 but slightly higher by 1975. By 1989, spending levels in the Atlantic provinces were between 5 and 10 percent lower than in Ontario. Ontario's influence on Quebec after 1975 is unclear, however, since the latter's per capita program expenditure remained significantly higher. Ontario did not appear to exert an upward pull on program spending, since in most years those provinces spent more per capita. In fact, it may have acted as a brake on expenditure by Manitoba, Saskatchewan, and British Columbia, which were more likely influenced to some extent by Alberta, a province that has consistently spent more than the rest of the country on a per capita basis over the past 25 years.

Expenditure by Economic Category

Further insight into provincial variations in expenditure can be gained by examining the ranking and share size of the main economic components of spending: current goods and services, fixed capital, transfers to persons, transfers to business, and interest on the debt (see Table 4.5). In 1987–89, the rankings were identical across most provinces; the exceptions were Nova Scotia, Manitoba, and Saskatchewan, where interest accounted for a larger share than transfers to persons, illustrating the problem that this nondiscretionary expenditure had become for fiscal policy. The size of the shares differed considerably, however. The largest component, spending on current goods and services, ranged from 42 percent in Newfoundland to 64 percent in Ontario, transfers to persons ranged from 10 percent in Manitoba to 28 percent in Newfoundland, and capital formation from 6 percent in Manitoba to 11 percent in Prince Edward Island.

Spending on Current Goods and Services (Consumption)

Per capita consumption spending (excluding capital consumption allowances) by the PLH sector in 1989 ranged from about $3,500 in Alberta to $2,100 in Newfoundland (see Table A.4 in Appendix A). Although the remaining provinces were fairly close together, Quebec, Ontario, and Manitoba were higher spenders than the other five. In the middle of the 1970s, when the health system was virtually what it is today, Newfoundland's spending was already much lower than the rest of the country. New Brunswick and Nova Scotia were also on the low side, but there was not much to choose between the remaining provinces.

Table 4.5: *PLH-Sector Expenditure Shares by Economic Category, 1987–89 Average*

	Exhaustive Expenditures		Distributive Expenditures		
	Current goods & services	Fixed capital	Transfers to persons	Transfers to business	Interest on debt
			(percentage of total)		
Newfoundland	42.1	8.1	28.0	3.1	18.7
Prince Edward Island	57.1	11.1	14.1	5.6	12.1
Nova Scotia	60.3	8.6	12.7	3.1	15.3
New Brunswick	57.1	10.5	16.4	2.3	13.7
Quebec	57.7	6.4	17.9	3.8	14.2
Ontario	64.1	7.9	14.6	2.4	11.1
Manitoba	57.5	6.4	9.8	5.5	20.8
Saskatchewan	52.3	8.9	12.3	7.5	19.0
Alberta	54.2	10.6	14.1	9.6	11.5
British Columbia	59.0	8.7	16.0	4.7	11.7
Yukon & NWT	68.9	17.3	5.4	8.0	0.4

Note: Transfers to persons have been adjusted for public service superannuation funds.

Source: Author's calculations, using data from Statistics Canada, *Provincial Economic Accounts*.

Variations also show up when public and private consumption spending are compared. Although the former increased faster than the latter in every case over the past three decades, the paths taken were far from identical (see Figure A.3 in Appendix A). A few developments are worth noting.

- Saskatchewan's early move into the welfare state left it with a ratio of PLH-sector consumption to private consumption higher than that of the other western provinces at the beginning of the 1960s, followed by a fairly moderate rise over the next two decades. The other two prairie provinces eventually caught up in the 1980s, but Saskatchewan moved ahead again late in that decade.
- Quebec's ratio of PLH-sector consumption to private consumption was similar to Ontario's until 1971, when the former

increased dramatically because costs of education and health were escalating. Even though sizable reductions were achieved after the 1981–82 recession, Quebec still ended the decade with a ratio higher than Ontario's.

- Newfoundland has historically had a much lower ratio of PLH-sector consumption to private consumption than the other Atlantic provinces; although there was a bit of a catch-up in the 1970s, it remained below the others.
- Prince Edward Island's ratio increased substantially in the first part of the 1970s and began to be cut back after the 1975 recession.
- By 1989, all of the provinces except Newfoundland, Manitoba, and Alberta had reduced their ratios to a level lower than before the 1981–82 recession.

Spending on Fixed Capital

Alberta was the biggest spender on fixed capital on a per capita basis in 1989, and Manitoba the lowest. Another big spender was Saskatchewan, and another low spender was Ontario. Although fixed investment is one of the most volatile categories of expenditure, the distribution by province was remarkably similar in 1975 and 1989, with two exceptions: Newfoundland's spending on fixed investment was the biggest in 1975, and Saskatchewan's was in the middle.

There has been considerable provincial variation in the pattern of PLH-sector capital expenditure relative to private fixed capital. Government involvement in this area has been particularly significant in New Brunswick and has had major cyclical impacts in Newfoundland. In Alberta, there was a major recovery in the ratio in the late 1970s; British Columbia had the same movement, assisted by expenditure for Expo '86.

Transfers

The distributional function was a major cause of rising government-expenditure-to-GDP-ratios in all provinces in the 1960s and 1970s.

Although transfers to persons dwarfed those made to business, it was the latter that rose dramatically after the 1960s. Both types of transfers had patterns that varied considerably across provinces.

Transfers to Persons. Per capita levels of transfers to persons had large interprovincial differences — differences that cut across regions. Moreover, their rise over the past 10 to 15 years varied considerably. For example, New Brunswick's payments became considerably larger than Nova Scotia's over the 1976–89 period, and Quebec's became very much larger than Ontario's between 1976 and 1981. British Columbia's per capita transfers were slightly higher than Alberta's in 1976 but very much lower in 1981 and 1989.

As a result of the 1981–82 recession and its aftermath, transfers to persons grew faster than GDP in most provinces in the first half of the 1980s, but afterward the record was mixed across the country. Newfoundland, Nova Scotia, New Brunswick, Quebec, Saskatchewan, and British Columbia managed to reduce the growth relative to GDP, but only in Newfoundland, Nova Scotia, and Quebec did the ratio fall below the 1977–81 average. In Alberta, it continued to rise (see Table 4.6).

In contrast with its spending on goods and services, Newfoundland's transfers to persons ($1,600 per capita) dwarfed those of the rest of the provinces — including the rest of Atlantic Canada — in 1989 as in many previous years. Furthermore, they accounted for almost 30 percent of its expenditures. Another measure of the burden of these payments to Newfoundland is the fact that over the past two decades they have been about 11 percent of GDP, more than double the ratio of the other Atlantic provinces. At the other end of the scale is Manitoba, which spent less than $630 per person in 1989 — not even 10 percent of its expenditures. Over the past decade or so, however, the growth of transfers was not very different from that of GDP in Newfoundland, but faster in Manitoba.

Among the remaining eight provinces, Quebec's payments per capita and as a share of total spending were the largest in 1989.

Table 4.6: *PLH-Sector Transfers to Persons, 1962–89*

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89	1989
		(average percentage of GDP)					*($ per capita)*
Newfoundland	6.8	9.9	11.3	11.0	11.2	10.9	1,608
Prince Edward Island	2.5	4.6	4.2	5.1	4.9	5.1	708
Nova Scotia	2.0	3.1	4.0	4.4	4.1	3.7	682
New Brunswick	2.2	3.9	4.4	4.9	5.4	5.1	872
Quebec	2.5	3.4	4.1	5.3	5.8	5.1	1,115
Ontario	1.2	2.5	2.4	2.6	2.9	2.9	833
Manitoba	1.6	2.6	2.7	2.4	2.8	3.0	626
Saskatchewan	1.7	2.6	3.0	3.3	4.5	4.3	793
Alberta	2.1	3.2	2.5	2.5	3.5	3.7	1,009
British Columbia	1.9	2.6	3.0	3.0	3.6	3.5	860
Yukon & NWT	0.3	1.6	1.8	1.9	2.3	2.3	859
Canada	*1.8*	*2.9*	*3.1*	*3.5*	*4.0*	*3.8*	*926*

Source: Author's calculations, using data from Statistics Canada, *Provincial Economic Accounts*. Excludes public service superannuation funds.

Alberta also made relatively high per capita payments — more than $1,000. At the low end, Prince Edward Island and Nova Scotia paid out about $700 per capita. For the most part, the growth in transfer payments in these provinces (except Nova Scotia) exceeded provincial GDP growth from the mid-1970s onward — and substantially so in Prince Edward Island, Saskatchewan, and Alberta. Only as the expansion of the 1980s matured did relative growth fall off in a number of provinces.

For most of the past two decades, Newfoundland's transfers to persons have been more than double those of the other Atlantic provinces on a per capita basis. New Brunswick's per capita payments have exceeded Nova Scotia's, and the gap grew in the 1980s. At the beginning of the 1970s, Quebec's and Ontario's per capita transfers were about the same. By 1976, however, Quebec was paying 50 percent more per capita and 75 percent more by 1981. The gap between the two provinces narrowed in the 1980s. A similar relationship developed between Manitoba and Saskatchewan. In 1971, Alberta's per capita payments were 28 percent higher than British Columbia's, but by the mid-1970s British Columbia's were higher. In 1981, Alberta again surpassed British Columbia, but by 1989 the gap had narrowed.

The reasons behind these divergences are worth exploring. As already noted, Newfoundland has long been Canada's poorest province, so it is not surprising that its social service payments are high. Differentials and changes in unemployment rates explain many of the other variations in levels and growth. GWA costs more in Quebec than in Ontario, mainly because of Quebec's higher rate of unemployment and, therefore, UI exhaustees.[25] In New Brunswick, the unemployment rate has been consistently much higher than in Nova Scotia since 1972 but the divergence increased in the 1980s. On the other hand, Manitoba's unemployment rate was below the national average until 1988, primarily because its population is so mobile. Prince Edward Island's unemployment rate was comparable to Nova Scotia's between the mid-1970s and mid-1980s, but while the latter's rate fell (from 13.6 to 9.9 percent in 1989) the former's rose (from 13.3 to 14.1 percent). Differences in generosity in welfare assistance and related support programs may also have been a factor in variations in transfers. For example, differentials in per person benefits appear to have contributed to the higher per capita payments in Quebec than in Ontario.[26] British Columbia has also had relatively generous welfare benefits for some time. Saskatchewan introduced a number of interest-rate subsidy programs for homeowners and for farmers, which held the government hostage to rising market rates.

Transfers to Business. From generally insignificant levels and shares of GDP in the 1960s, transfers to business became a more and more important budgetary item in the 1970s in all the provinces, particularly Prince Edward Island, Saskatchewan, and Alberta. On a percentage of GDP and on a per capita basis, Alberta and Saskatchewan were the biggest spenders on subsidies to and assistance for capital investment by business in the 1980s (see Table 4.7). They also had a very large increase since the mid-1970s. The largest per capita increase, however, was by Quebec. The Atlantic provinces (other than Prince Edward Island) cut back or checked the growth of these payments during the 1980s.

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[25] See the analysis reported in François Vaillancourt and Julie Grignon, "L'aide sociale au Canada et au Québec 1970-1985: évolution et analyse," in *Le redressement des finances publiques québécoises* (Montréal: Institut C.D. Howe, 1986).

[26] Ibid.

In the resource-dependent provinces, it was the resource sectors that by and large attracted the most support — for example, Petroleum Incentive Program (PIP) payments to the energy sector in Alberta and assistance to farmers in Saskatchewan. Cash payments are, however, a very imperfect measure of fiscal assistance to business in any province, since tax shelters and special tax status are also popular ways of attracting or stimulating industry.[27]

Interest Payments. Debt servicing has become a matter of concern in all provinces, even the wealthy ones.[28] Nevertheless, the problem is not of equal concern across the country.

Newfoundland is in a class by itself, with its interest payments making up almost 20 percent of its expenditure and amounting to more than $1,000 per person in 1989; they increased by about 3 percent of provincial GDP in comparison to levels in the first half of the 1970s.

The other nine provinces' interest obligations can be evaluated similarly in terms of share of expenditure, size of per capita payments, and increase relative to GDP. By these criteria, the provinces

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[27] Often, a province's assistance to business is directed to its own Crown corporations; consider, for example, Manitoba's intervention in the foreign-exchange losses from Manitoba Hydro's debt service.

[28] Users of Statistics Canada's measures of gross interest payments should bear in mind that those figures include interest on debt some provinces have issued on behalf of their enterprises. The following analysis has taken informal account of the fact that Saskatchewan and Manitoba data are particularly biased upward because of this treatment.

Table 4.7: ***Provincial and Local Transfers to Business, 1962–89***

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89	1989
			(average, percentage of GDP)				*($per capita)*
Newfoundland	0.2	1.0	1.8	1.4	1.1	1.2	170
Prince Edward Island	0.1	0.8	0.9	1.0	1.4	2.0	292
Nova Scotia	0.1	0.2	0.6	1.6	1.4	0.9	177
New Brunswick	0.0	0.3	0.5	0.7	0.9	0.7	136
Quebec	0.3	0.3	0.4	0.8	1.3	1.1	240
Ontario	0.1	0.1	0.3	0.4	0.5	0.5	130
Manitoba	0.5	0.4	0.9	1.5	1.7	1.7	356
Saskatchewan	0.1	0.5	1.4	1.9	2.3	2.6	656
Alberta	0.1	0.4	0.9	1.1	3.3	2.6	601
British Columbia	0.5	0.7	0.9	1.2	1.2	1.0	233
Yukon & NWT	0.0	0.0	0.8	2.7	2.9	3.4	1,256
Canada	*0.2*	*0.3*	*0.6*	*0.8*	*1.3*	*1.1*	*250*

Source: Author's calculations, using data from Statistics Canada, *Provincial Economic Accounts*.

that have the heaviest debt burden — Nova Scotia, New Brunswick, Quebec, and Manitoba — also have the most serious debt-service problem. Of the four, Manitoba underwent the worst deterioration after the first half of the 1970s; one reason was that a sizable amount of its debt is foreign-denominated, so the decline in the value of the Canadian dollar caused additional strain (see the box on page 168).

Alberta's worsened situation has to be seen in the light of the income that the province earned on its considerable financial assets. Nevertheless, the size of its gross payments and their rise relative to GDP during the 1980s should be seen as a warning of possible problems in a few years, if the province racks up further sizable deficits. Saskatchewan, which does not have the same financial reserves as its neighbor, saw its debt service become a more serious constraint on its program expenditure during the 1980s. In its favor, however, is the fact that its PLH-sector deficit declined absolutely from 1986 to 1989. Ontario and British Columbia were in the strongest position, having — along with Prince Edward Island —

gross interest payments that were the lowest per person in the country and about 12 percent of total expenditure. Going into the current recession, both British Columbia and Ontario had two years of moderate surpluses in their PLH sectors and made some headway in advance of the inevitable coming increase in their debt burdens, which will have to be serviced at still-high interest rates.

The Leakage of Funds

Many provinces face serious leakage of funds in the form of interest payments on marketable securities either to other provinces or to foreigners. The service cost of provincial governments' foreign-held bonds amounted to $3.3 billion in 1989. Another half billion was paid on foreign-held municipal debt. Some 30 percent of the whole PLH sector's gross interest payments was made to foreigners.

The extent of the problem varies across the country. Half of the Atlantic provinces' direct debt in 1988 was in foreign currency, and approximately 37 percent of their gross interest payments went abroad. Another 4 percent was held by the Alberta Heritage Savings Trust Fund. Of the remaining bonds, it is likely that a large proportion was held by financial institutions operating in Ontario. Manitoba and Alberta had 63 percent of their outstanding debt in foreign currencies; Ontario had 16 percent.

To minimize this kind of "loss," a number of provinces have devised ways of retaining interest payments within their borders by offering securities exclusively to their own residents. For example, Quebec has issued savings bonds annually for many years; more recently, British Columbia, Saskatchewan, and Manitoba have used a form of savings bonds. Such instruments must often, however, compete with aggressive Canada Savings Bond campaigns, unless there is a lock-in feature.

Provincial and municipal governments tend to rely on long-term debt financing, which was generally advantageous during the early to mid-1970s. In the late 1970s and early 1980s, however, borrowers frequently locked in high-rate coupons, a fact that will continue to affect the cost of debt service for some time. Even the Canada Pension Plan funds, which are lent to the provinces for 20 years at the going rate for long-term Government of Canada bonds, are part of this problem for those provinces that needed them. The provinces have far less flexibility than the federal government in managing their debt with a view to taking advantage of likely swings in interest rates.

Did Taxpayers Get More Government for the Higher Expenditure?

Growth in government spending relative to GDP or private spending may or may not mean that taxpayers received an improvement in services. If a rise in income that is redistributed (or borrowed from abroad and distributed) exceeds GDP growth, there is about the same relative gain in constant-dollar terms. One cannot assume the same conclusion, however, for about two-thirds of government spending — the provision of hospital and medical care, education, roads, local services, and so on — unless prices for those services rise at about the same pace as prices for private-sector goods. As noted in Chapter 2, aggregate government prices rose faster than private-sector prices from the early 1950s to the mid-1980s.

Provincial data on prices are available starting only in 1971 and only for the components of final domestic demand, which includes government expenditure on goods and services. Yet, from this limited information different developments among the provinces emerge.

In 1971, the government price level was lower than the consumer price level in all provinces, but the relationship was reversed for various periods and at different times over the following 18 years — during the 1970s in the five eastern provinces, and during the 1980s in the remaining provinces (except Saskatchewan). By 1989, the original correspondence had been re-established everywhere except Prince Edward Island, while there was a remarkable convergence of the ratios.

In comparing the ratios of government and consumer prices by province, one needs to bear in mind provincial variations in inflation. Over the 1971–89 period, the increase in consumer prices ranged from 12 percent less than average in Alberta to 7 percent more than average in Quebec. The disparities in government price increases were much greater, ranging from 35 percent more than average in Saskatchewan to 76 percent less than average in New Brunswick. The direction of variation was the same in only five provinces. In Nova Scotia, New Brunswick, and British Columbia, the increases in both indexes were less than average, while in Ontario and Manitoba they were more. Variations in the performance of inflation itself and the ratio of government to consumer prices were even greater over each of the two major business cycles that occurred during the period.

In the 1970s, government price inflation ran ahead of consumer price inflation in all provinces but Nova Scotia, where it fell behind after 1976. Thus, for most of the 1970s, the rise in the ratio of government consumption to private consumption that took place in all provinces but Ontario represented a smaller relative increase in real government goods and services at best, and a decline at worst. Residents of Prince Edward Island fared the worst from the relatively higher rate of public-sector inflation, but people in New Brunswick, Quebec, Saskatchewan, and Alberta did very poorly as well with regard to the real value of every additional dollar spent by the public sector. In Ontario, where the ratio of government to private consumption was stable, residents actually suffered a relative real decline (see Figure A.3 in Appendix A).

Over the course of the 1980s, government prices rose less than consumer prices in the five eastern provinces, but not before the situation had worsened still further in Newfoundland, Nova Scotia, New Brunswick, and Quebec. In Ontario, government inflation continued to run ahead of consumer price inflation for almost all of the 1980s, dropping off only in 1989. In the west, government inflation diminished at least after mid-decade. In all provinces, however, relative changes in current-dollar government consumption in the 1980s reflected the change in real goods and services provided by government more accurately than they did in the 1970s. Indeed, the shrinkage in government consumption as a percentage of private consumption that has taken place since the 1981–82 recession is about the same whether expressed in current or constant dollars.

The following points can be made about the developments in government prices relative to consumer prices since 1971.

- Prince Edward Island, Saskatchewan, and Alberta had the smallest ratios of government to consumer prices in 1971 and the largest increase over the 18 years.

- In Ontario, Saskatchewan, and Alberta, government inflation exceeded consumer inflation for most of the period. Although the ratio declined at the end of the 1980s, no trend was established.
- The ratio peaked earliest in Prince Edward Island, in 1979, and latest in Ontario, in 1987. It peaked during the 1981–82 recession in Newfoundland, Quebec, and British Columbia, and in the mid-1980s in the remaining provinces.
- Newfoundland, Quebec, and British Columbia experienced a large upsurge in their relative government prices, but at different times. Newfoundland's ratio jumped in the early 1970s and again in 1980; it then began to decline markedly in 1983. Quebec's ratio shot up in 1976 but did not begin to fall until the latter part of the 1980s. British Columbia's ratio bulged between 1981 and 1985.

As noted in Chapter 2, wages have an important influence on price performance in the PLH sector.[29] In the Atlantic provinces and Ontario, public settlements exceeded private settlements in most years after 1978. Education and health-care workers had settlements higher than private-sector workers after the 1981–82 recession. The same was true for local and provincial government employees, although the differentials were not as large. In British Columbia, in sharp contrast with Ontario, postrecession settlements for civil servants and education and health-care workers were generally lower than private-sector settlements until 1988, reflecting the strong action taken by that province's government to restrain wage increases in the public sector. Public-sector settlements in the prairie provinces were also generally lower than private-sector settlements after the recession.

It appears that the political will to deal with disparities in price increases between the public and private sectors differs markedly across the country, but in general a serious deterioration in balance-sheet health is likely to be a powerful motivating force. Ontario's lethargy in correcting the relatively faster growth of PLH-sector prices owes much to its relatively low net debt ratio.

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[29] There is, however, little consistent information about provincial wage rates, and settlement data are only available from 1978.

It is also clear that the government sector was under more wage pressure than the private sector for almost four decades. Without widespread effort in the early 1980s, public-sector price inflation might have continued to exceed private inflation.

Why does this pressure exist, and what policy is implied? As suggested in Chapter 2, a number of different issues are involved. Some cases — nurses are an example — clearly involve a breakdown in a previous monopsonistic situation. In the case of the civil service, there is a need to relate the wages to performance in some way. In some disparities among provinces — for example, between Quebec and British Columbia nurses' salaries or between Quebec and Ontario teachers' salaries — are the seeds of future problems for the low-pay jurisdiction. Rather than attacking the costs of programs by punitive action against the employees of the relevant sectors, governments need to examine ways of making markets work better and to seek alternative delivery systems of many services.

Variations in the Growth of Expenditure by Function

When expenditure data are broken down by function, the provincial variations are also interesting (see Table 4.8).[30] In 1989, four provinces — New Brunswick, Nova Scotia, Ontario, and British Columbia — spent 57 to 62 percent of their total expenditure on health, education, and welfare, Saskatchewan spent 46 percent, while the remaining five spent 51 to 54 percent. Relative to the mid-1970s, this share was significantly higher in Ontario and moderately higher in the Atlantic provices and British Columbia. It was lower in the other four provinces — substantially so in Manitoba.

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[30] Recall that such data are on a Financial Management System (FMS) basis in current dollars and that the series starts in 1976.

As a share of GDP, combined expenditure on health, education, and social services fell in Prince Edward Island, Nova Scotia, New Brunswick, and Quebec in the 1983–89 period compared with the 1976–81 period.[31] The share was about the same in British Columbia, and significantly higher in the other five provinces.

Education was the largest component of spending on average in all provinces from the mid-1970s to the early 1980s. During the 1983–89 period, health-care expenditure matched or exceeded spending on education in all provinces except Prince Edward Island, Newfoundland, and Quebec.[32] This development raises questions about the influence of federal government financing on these programs since, for example, Ottawa switched from matching financing of postsecondary education and health to block-funding in 1977.

Relative to GDP, education spending declined in all provinces but Saskatchewan and Alberta in the 1983–89 period compared with the 1976–81 period, and in Ontario it did not decline until after the mid-1980s. Quebec saw an increase in the education-spending-to-GDP ratio between 1971 and 1981, while in Alberta and Saskatchewan the ratio rose steadily in the 1980s, reflecting the poorer performance of GDP. In 1978, Quebec began to re-evaluate its payments for university construction.[33] About the same time, the Quebec government expressed the intention of exercising greater control over management and capital costs at the primary- and secondary-school level.

As a share of GDP, health-care expenditure rose in all provinces but Prince Edward Island during the 1983–89 period compared with the 1976–81 period. Recent developments do not point to a broad-based change in this trend. Only in Newfoundland, Prince Edward Island, and Manitoba did the ratio to GDP shift down in the late 1980s.

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[31] I chose these periods so as to omit 1982, when the recession caused GDP to grow very little, making the ratio move up sharply and off trend.

[32] In British Columbia and Manitoba, health care equaled or exceeded education expenditure by 1980. Only in 1989 did health spending surpass education spending in Quebec.

[33] $60 million a year for seven institutions, compared with less than $20 million for 17 in Ontario.

Table 4.8: ***Provincial and Local Expenditure by Function, 1989***
(Financial Management System basis)

	Nfld.	**P.E.I.**	**N.S.**	**N.B.**	**Que.**	**Ont.**	**Man.**	**Sask.**	**Alta.**	**B.C.**	**Terr.**
					(percentage of total expenditure)						
General services	6.7	6.2	4.0	5.8	7.3	5.3	5.7	5.7	5.4	5.5	19.9
Protection of persons and property	4.6	4.5	5.0	4.9	4.4	6.1	4.9	4.3	4.8	5.7	7.8
Transportation and communications	8.5	11.2	6.3	8.9	6.9	5.0	5.8	7.0	8.1	6.6	9.7
Health	18.7	19.2	23.4	23.0	19.2	25.1	20.3	20.9	20.5	26.2	13.7
Social services	10.3	11.1	11.3	13.1	15.0	13.8	12.4	8.0	10.8	13.4	7.4
Education	21.9	20.5	23.5	20.8	19.5	22.9	18.8	16.7	19.6	17.5	16.4
Resource conservation and industrial development	5.2	11.0	5.5	4.8	3.5	2.6	4.9	9.8	12.3	4.7	4.5
Environment	2.3	1.3	2.6	1.8	4.0	3.5	2.3	2.9	3.6	2.8	3.0
Recreation and culture	2.1	2.2	2.3	2.0	2.5	3.0	2.7	3.0	3.4	3.6	4.0
Regional planning and development	0.6	0.4	0.6	0.5	0.5	0.6	1.5	0.7	0.6	0.7	3.0
Debt charges	17.0	11.6	12.9	13.1	13.3	10.0	18.9	18.8	7.4	11.5	0.3
Other expenditure	2.2	0.9	2.5	1.4	4.0	2.2	1.7	2.1	3.4	2.0	10.3

Source: Author's calculations, using data from Statistics Canada.

Expenditure on social services rose relative to GDP in all provinces but Saskatchewan during the 1983–89 period compared with the 1976–81 period. From a very high peak in 1983, Quebec achieved a large reduction in its ratio of spending to GDP by the late 1980s. In Ontario, however, the ratio — though much lower — has been on a long-term rising trend. New Brunswick and Saskatchewan both reduced their ratios significantly in the late 1980s. Most of the other provinces' ratios crept upward or remained at pre-1982 levels.

Spending on general services ballooned in Quebec during the 1977–83 period, when the province was forced to accept some large wage increases. Although it made major efforts to restrain the growth of spending on wages and salaries during the next six years, by 1989 this expenditure had still not been reduced to its 1976 share of the province's GDP. General service costs also became more burdensome in Newfoundland, creeping up as a percentage of GDP in the 1980s.

Expenditure on resources, conservation, and industrial development accounted for 4.1 percent of GDP in Prince Edward Island, 3.2 percent in Saskatchewan, and 4.6 percent in Alberta from 1985 to 1989. Although there is recurring pressure on provincial governments for such spending, the federal government also frequently provided direct assistance to primary industries, notably agriculture, in recent years.

Variations in Revenue Developments

The provinces differ even more in revenue composition and developments than in expenditure. The five or six provinces that receive equalization payments naturally have a relatively large share of government transfers in their total revenue. One might expect that their per capita own-source revenue would also be relatively low. Although this is certainly true of the Atlantic provinces, it has not always been true of the others, and the differences between the "have-not" provinces and the more-advantaged ones have often been surprisingly small. Some of the most interesting variations are in the composition of own-source revenues; these differences generally reflect the economic differences discussed earlier in this chapter.

Royalties and interest on loans, investments, and advances accounted for a large proportion of own-source revenues in the three most western provinces. These two sources were connected in Alberta and Saskatchewan, where resource revenues were invested through heritage savings funds. The earnings of the Alberta Heritage Savings Trust Fund were particularly large, both in absolute terms and as a share of provincial revenue; in 1989, interest receipts exceeded royalty revenue.

Own-Source Revenue

Between 1977 and 1989, an increase in own-source revenue relative to GDP took place in every province but Alberta.[34] For the 1982–86 period, tax revenue alone rose as a proportion of GDP in every province but Nova Scotia. (Nova Scotia chose to finance a substantial amount of its rising expenditure through borrowing rather than raise the revenue-to-GDP ratio from its 1977 level.)

Royalties and investment income enabled Alberta to raise more revenue per capita than the other provinces in both 1979 and 1989, but the gap with the next-ranked province shrank over the decade, as did Alberta's differential with Prince Edward Island, the smallest revenue-raiser in both years. The position of the other two resource-rich provinces — Saskatchewan and British Columbia — which ranked close together in 1979, dropped below that of Ontario, close to the level of Quebec, in 1989. The per capita revenue raised in the Atlantic provinces — always the lowest — were remarkably close together in both years.

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[34] Measuring revenue as a percentage of GDP presents a number of problems when making interprovincial comparisons. The investment-income component includes an offset to some of the interest expenditure. Even the earnings or investments made with royalty revenue are overstated by the inflation premium that compensates for the erosion of the principal. Because oil and gas royalties are a payment for the depletion of a resource, they might be better excluded from government revenue and treated as sales of assets in the financial flow accounts. However, some provinces tax their resource sectors, rather than levy royalties, and Statistics Canada includes such taxes in indirect taxes.

Relative Importance of the Major Revenue Sources

In nine provinces, the three most important taxes in terms of revenue raised in 1989 were the PIT, the retail sales tax (RST), and the property tax, although not always in that order (see Table A.8 in Appendix A). Alberta, which does not levy an RST, is the exception, with resource levies still being the most important source. In Newfoundland, Prince Edward Island, and New Brunswick, the RST ranked first and the PIT second. The PIT was also in second place in Alberta. In all of the other provinces, the PIT raised the most tax revenue, with the property tax coming second in the four western provinces. Even in Ontario, the share of the property tax was almost as large as that of the RST, while in Quebec, health and social insurance payroll taxes raised almost as much revenue as the property tax. These three taxes combined made up 55 to 68 percent of the own-source revenue of the PLH sector of all the provinces except Saskatchewan and Alberta.

Sources of revenue are rather less diverse in the Atlantic provinces than in the rest of the country. In general, those four provinces rely on a combination of the PIT and RST for more than 50 percent of their own-source revenue. Although the property tax is important there, it accounts for a much smaller share than the two other taxes. Newfoundland collects virtually no property taxes outside the urban centers and consequently relies more heavily on the RST. When the PIT and RST are combined, the variations in per capita collections within the Atlantic region virtually disappear.

The Atlantic provinces and Quebec had higher retail sales tax rates than the more western provinces for most of the 1970s and 1980s. Only starting in the mid-1970s did Newfoundland have higher rates than the other four eastern provinces, though New Brunswick tended to raise its rates sooner than Nova Scotia or Prince Edward Island. It is not surprising, therefore, to find that the RST is the largest revenue category in Newfoundland and New Brunswick as well as in Prince Edward Island.

The most important change in tax revenue shares between 1979 and 1989 was the reduction in the relative size of property tax revenue in a number of provinces and the opposite trend in sales tax revenue in all provinces but Manitoba. Worth noting is the much greater dependence on the PIT by Ontario and the western provinces, and the increase in significance of payroll levies — workers' compensation board (WCB) premiums, health-care taxes, and so on — in Newfoundland, New Brunswick, Quebec, Manitoba, Alberta, and British Columbia. With the introduction of new payroll levies for health care in Ontario and in Newfoundland, and the ongoing pressure of WCB obligations, this revenue is likely to account for an even greater share in the future.

Combined corporate income taxes, capital taxes, and other taxes on corporations accounted for 4 or 5 percent of own-source revenues in all provinces except Ontario, Manitoba, and Alberta, where the percentage was much larger. Since 1979, these taxes have accounted for a smaller share in most provinces, but only in British Columbia has there been a substantial fall. The gasoline tax in 1989 had about as large a share as the corporate tax in most provinces, with the notable exceptions of Ontario, Manitoba, and Alberta — a situation very different from that of 1979. Despite the introduction of a number of new taxes and charges over the past decade or so, miscellaneous revenue fell in all provinces but Quebec, Saskatchewan, and Alberta.

For the western provinces, investment income is an important source of revenue. In 1979, natural resource revenue provided the biggest share of own-source revenue for Saskatchewan and Alberta, with interest being significant but considerably smaller. Ten years later, however, resource revenue had become overshadowed by the interest earnings of these provinces' assets; in British Columbia, the drop in the share of resource revenue was more than made up by the rise in interest income.

Quebec had the highest ratio of tax revenue to GDP by a wide margin for two decades and Alberta had the lowest (see Table A.2 in Appendix A). Newfoundland had the largest increase during that period, going from the second-lowest province to the second-highest.

Meanwhile, Saskatchewan's ratio declined until it was the second-lowest. The remaining Atlantic provinces, Ontario and Manitoba had remarkably similar ratios for the two decades.

Using a crude measure of the tax levied on individuals in 1989 (Table 4.9), Ontario was in the lead, followed by Quebec. Manitoba and British Columbia were further behind, and then, with an even larger gap, the rest of the provinces were clustered together. These groupings had not changed radically from those of a decade before, but British Columbia had slipped from the highest place and Manitoba had overtaken Saskatchewan and Alberta.

Interprovincial Variations in Tax Burdens

Provincial per capita taxation estimates do not say very much about the distribution of the burden among individual citizens, which will in the end influence their economic behavior.[35] The Fraser Institute's calculation of an average family's tax burdens, which includes all taxes and charges at all government levels, as well as CPP/QPP contributions, for various income levels, shows that Ontario replaced Quebec as the most heavily taxed province in 1990; clustered together after Quebec were British Columbia, Nova Scotia, and Manitoba.[36] Saskatchewan has calculated a less comprehensive allocation of provincial taxes for each province for three income levels for a number of years.[37] By this measure, families in Ontario and Quebec in general had heavier burdens, which accords with the

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[35] Some provinces — Alberta and British Columbia in 1990 — include tables of comparative provincial tax rates in their budgets, but these do not give any idea of comparative tax burdens or even effective rates for each tax base since the structures of each tax vary from province to province.

[36] Isabella Horry, Sally Pipes, and Michael Walker, *Tax Facts Seven* (Vancouver: Fraser Institute, 1990), p. 78. Calculation of the rankings excludes the deficit and natural resource taxes.

[37] These estimates do not attribute such taxes as the corporate income tax to the individual family selected and do not include local government taxes. Included in the calculation are the PIT, tax credits and rebates, health premiums, RST, and the gasoline tax. In its 1990 budget, Saskatchewan departed from its former practice of examining the earned income of a family of four in different income brackets and included one income level only and the tax of a single-parent family. Thus, no inference is now possible on progressivity (Saskatchewan, Budget Address, 1990, p. 28).

Table 4.9: ***Provincial and Local Taxes Per Capita, 1989***
(Financial Management System basis)

	Taxes and Levies on Individuals[a]	Own-Source Taxes and Levies[b]
	(dollars)	
Newfoundland	2,243	2,588
Prince Edward Island	2,121	2,305
Nova Scotia	2,360	2,703
New Brunswick	2,417	2,721
Quebec	3,512[c]	4,095[c]
Ontario	4,036	4,908
Manitoba	2,882	3,549
Saskatchewan	2,590	3,169
Alberta	2,380	2,990
British Columbia	3,248	3,761
Yukon & Northwest Territories	1,913	2,400

[a] Calculated as personal income tax *plus* consumption taxes *plus* health and social insurance levies *plus* property taxes.

[b] Calculated as own-source revenues *minus* resource revenues *minus* investment income *minus* sales of goods and services.

[c] Adjusted for the personal income tax abatement.

Source: Author's calculations, using data from Statistics Canada and Canada, Department of Finance.

Fraser Institute findings, but Newfoundland also shows up as a high-rate province. New Brunswick follows close behind, but Nova Scotia was in the middle by 1989. Residents of the four western provinces, including British Columbia, had the lightest burdens.

There are some important exceptions to these generalizations. Quebec now imposes the smallest burden on low- income families, although the western provinces, except British Columbia, continue to tax this group relatively lightly. In the last two or three years, Manitoba and Saskatchewan have moved their effective tax rates closer to Ontario's, and Alberta — previously well below the other western provinces — has been closing the gap with British Columbia.

Between 1981 and 1986, the tax burden on low-income families was increased disproportionately across the country. Quebec and

Alberta: Low Taxes, High Expenditure

After the Alberta government set up the Alberta Heritage Savings Trust Fund (AHSTF) in 1976, it transferred 30 percent of its nonrenewable resource revenue to the fund. Part of this money was invested in capital projects, and the rest lent out — mainly to Alberta government enterprises.* The earnings on these investments were added to the fund, accounting for more than 70 percent of its revenue by 1981.

In the wake of the 1981–82 recession, which had dampened resource revenue, creating a deficit, Alberta decided to transfer the AHSTF investment earnings to general revenue for the period September 1, 1982, to August 31, 1984. Then, in the 1983 budget, the treasurer announced that for the two fiscal years beginning April 1, 1983, only 15 percent of nonrenewable resource revenue would be transferred to the fund. The 15 percent was, however, maintained until 1987, at which time transfers of nonrenewable resource revenue were suspended "until the province's financial objectives are met."**

In spite of the "temporary" nature of these initiatives, the province has found persuasive arguments for prolonging them. Although the Alberta economy began to recover from its 1986 downturn the following year and has yet to show signs of succumbing to the current recession, the province has continued to employ both the AHSTF investment income and its entire nonrenewable resource revenue as general budgetary revenue. Neither has there been any acknowledgement in the operation of the fund of the component of investment income that represents the inflationary erosion of the financial assets. Thus, the freezing of the principal means that it has been shrinking in real terms.

Even though Albertans had enjoyed the lowest tax rates in the country for many years, the province did not rush to increase them, waiting until 1987 (the second budget after the oil price collapse of early 1986) to introduce some significant tax increases. According to the province's own estimates, Albertans still had the lowest taxes in Canada in 1990.† It also had the highest per capita expenditure in 1989.

* There was a Canadian Investment Division, which was allocated funds to be lent to other provinces but the amount involved was a small proportion of the total.

** Alberta, Budget, 1987, p. 14.

† Alberta, Budget, 1990, p. 24.

Prince Edward Island made very small increases, but New Brunswick, Saskatchewan, and British Columbia imposed substantial rises (2 to 3 percentage points). For middle-income families, increases were made in all provinces except Quebec, which reduced

Problems in Measuring Tax Burdens

Making interprovincial comparisons of tax burdens is fraught with problems. Both federal and provincial taxes should be taken into account, but including federal taxes runs straight into the problem of appropriate allocation among the provinces, which is very much tied up with the question of incidence. For example, should the manufacturers' sales tax and the air transportation tax be allocated to the province from which it is collected (as is done in the Provincial Economical Accounts) or to the province that pays it in the final selling price? If a foreigner pays the tax, should the amount not be excluded from the accounts of all the provinces.

Problems of incidence arise even with the own-source revenue of individual provinces. Corporate income tax paid to a provincial government may not be borne by any of the residents if it is all shifted to out-of-province shareholders. The greatest incidence of Alberta's large oil and gas royalties is likely outside the province, perhaps the country. Moreover, when the PLH sector's share of a tax burden is shown separately, an adjustment should be made for the additional tax points levied by the Quebec government, instead of the federal government, in lieu of cash transfers as part of the fiscal arrangements.

Some provinces have published their own calculations of tax burdens, but none of them overcomes these problems. For example, Quebec often compared the tax burdens of its own private sector and that of Ontario by applying its and its neighbor's tax structure to its own tax base, but no attempt was made to deal with the incidence question.*

One can gain a *sense* of the difference in tax burdens by calculating ratios of taxes to GDP and per capita in a number of ways. Yet all of these measures need to be used with caution.**

* See, for example, Quebec, Budget, 1990, pp. E42–E43.

** See John Whalley and Irene Trela, *Regional Aspects of Confederation* (Toronto: University of Toronto Press, 1986), pp. 99–136; and C.D. Howe Research Institute, *Why Do the Balances Differ on Federal Receipts and Expenditures in Quebec?*, Accent Québec 1 (Montreal: C.D. Howe Research Institute, 1977), pp. 9–10. The second study is concerned only with the incidence of fiscal taxes, but its cautions apply equally to provincial taxes.

the burden. The increases in the five most western provinces were quite a bit larger than those in Atlantic Canada.

Progressivity in Provincial Tax Systems

In the Saskatchewan government studies, Quebec, followed by Manitoba and Newfoundland, emerged with the most progressive tax system from 1984 to 1989. The other provinces showed quite low variances, although by 1989 Ontario's progressivity had been reduced much more than the others', making it the least progressive province.

Quebec's tax policies since the mid-1980s have been concerned with assisting families, particularly those with lower incomes. The provincial government calculated that in 1990, a couple with two children and earned income up to about $40,000 paid less income tax in Quebec than it would in Ontario.[38]

Because of the tax-collection agreements, the other nine provinces have less flexibility in departing from the federal structure of progressivity, but many have secured agreement for some variations. To assist low-income residents, Ontario introduced property-tax credits in the early 1970s and later sales-tax credits; a number of other provinces followed. In 1987, Manitoba, impatient with delays in federal PIT tax reform, moved to "by-pass as many...preferences as possible by applying an income tax directly against net income."[39] In particular, it taxed capital gains, which at the time were subject to a $500,000 lifetime exemption. At the same time it introduced a tax reduction related to family size and income and switched its surtax to the new flat-rate tax. All of these measures were designed to increase progressivity as well as raise revenue.

Some Observations on Own-Source Revenue Developments

The provinces have tapped a variety of new revenue sources in recent years. Two such instruments, characterized by their broad bases and low rates,are the flat-rate income taxes of the prairie provinces and the capital taxes that virtually all provinces now levy in one form or another. A third is the payroll tax, which Quebec has had for some time and which has been introduced recently in Manitoba, Ontario, and Newfoundland. Some of the new taxes reflect some goal other than fiscal policy — examples are environmental levies, such as used tire taxes. But many of the other new taxes and charges — for example, Ontario's lot levy — seem to have few objectives other than raising more revenue for the PLH sector in general.

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[38] Quebec, Budget, 1990, p. E-9.

[39] Manitoba, Budget Address, 1987, p. 27.

That goal raises a concern. When a province tries to address its deficit problem by relying more heavily on revenue increases than on spending restraint, it finds itself trying to tap "new" sources, but, of course, there are few new ways to raise significant amounts of new revenue. In the end, most of these innovative tax vehicles are borne by the same people who are paying the other taxes. A flat-rate income tax or a surtax may not look as bad as an increase in the PIT rate, but apart from some redistributional effects that may have been built in, it still reduces individuals' disposable incomes. Eventually, multiple assaults on virtually the same field may backfire and the province may find the base shrinking from overtaxation. Manitoba has been cutting back the scope of its payroll tax for this reason.

It is also interesting to note that, in seeking new revenue, the provinces have been using taxes on income or wages, while the federal government has been turning to consumption taxes — traditionally a strong provincial source. If the federal government continues to lean more toward taxing spending than income, the question arises as to how many provinces will work against this trend by taking up the income tax room vacated by the federal government. Four provinces — Newfoundland, Prince Edward Island, New Brunswick, and Ontario — raised their PIT rates after the 1987 federal tax reform; two others — Alberta and British Columbia — had already introduced increases for 1987.

Transfers from the Federal Government

Transfers from the federal government to provincial and local governments include the major programs of equalization, EPF, and CAP, as well as relatively low-cost programs, such as crop insurance, official languages in education, justice, transportation, and so on.[40] Direct cash transfers in 1989 ranged from 42 or 43 percent of total expenditure in Newfoundland and Prince Edward Island to 12 percent in Ontario and Alberta. On a per capita basis, the amounts ranged from nearly $2,400 in Newfoundland to almost $600 in Ontario. What is surprising is the size of the transfers to the advantaged provinces: Alberta received $806 per capita and British Columbia $734 (see Table 4.10).

Atlantic Canada. Considering the number of changes that the various transfer programs have been through during the past four decades, it is interesting to find that in the Atlantic provinces federal transfers accounted for almost the same proportion of expenditure in the 1980s as they had in the first half of the 1960s. The percentage dropped slightly in Newfoundland and rose in New Brunswick.

If fishermen's benefits, which are paid to individuals under UI but which reduce the amount that would otherwise be paid for GWA under CAP, were included with government-to-government transfers, Newfoundland would be the most transfer-dependent of the Atlantic provinces. As it is, such transfers made up a larger proportion of expenditure in Prince Edward Island than in Newfoundland in 1989. Equalization was by far the weightiest transfer, about two-thirds of the total. The other two Atlantic provinces depend somewhat less on federal transfers (35 percent to 40 percent of expenditure), and again equalization accounts for the lion's share.

Between 1981 and 1989, total transfers as a proportion of expenditure dropped in all the Atlantic provinces.

Central Canada. Quebec, being a "have-not" province, depends more than Ontario on federal transfers — they financed about a fifth and

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[40] As already discussed, they are by no means the total of federal assistance to the provinces, because the data do not include direct support of or tax expenditures for business, private or government-owned.

Table 4.10: *Federal Transfers to Provinces and Municipalities, 1961–89*

	Federal Transfers					**Total Transfers**				
	1961	**1971**	**1976**	**1981**	**1989**	**1961**	**1971**	**1976**	**1981**	**1989**
	(dollars per capita)					*(percentage of expenditure)*				
Newfoundland	127	421	740	1,325	2,392	52.3	50.8	41.5	44.1	43.7
Prince Edward Island	11	131	1,093	1,453	2,331	38.7	57.0	63.5	49.9	47.8
Nova Scotia	95	294	633	1,108	1,802	37.8	34.9	39.6	36.6	35.1
New Brunswick	100	364	687	1,124	2,021	37.7	44.6	40.8	42.8	39.6
Quebec[a]	41	285	521	858	1,335	15.3	29.6	25.9	23.2	21.7
Ontario	51	147	297	377	591	15.6	14.3	15.8	13.3	11.0
Manitoba	80	248	484	816	1,524	24.3	28.4	26.2	27.1	24.5
Saskatchewan	79	259	316	572	1,180	22.9	31.7	16.9	16.6	18.3
Alberta	77	171	320	378	806	19.7	16.6	16.2	9.0	11.9
British Columbia	91	142	296	403	734	24.8	16.3	15.8	11.9	14.2
Yukon & Northwest Territories	54	1,208	3,359	5,994	17,449	33.3	64.0	81.1	77.1	122.2
Canada	*62*	*200*	*371*	*622*[a]	*1,055*[a]	*19.8*	*20.8*	*18.8*	*17.8*	*17.5*

[a] Includes Quebec's personal income tax abatement.

Note: Expenditure is total provincial, local, and hospital spending adjusted by subtracting public service superannuation funds and capital consumption allowances.

Source: Author's calculations, using data from Statistics Canada, *Provincial Economic Accounts*, and Canada, Department of Finance.

a tenth of expenditure respectively in 1989. Equalization made up about 40 percent of transfers to Quebec.[41] Between 1981 and 1989, the share of spending that cash transfers made up fell less in Quebec than in Ontario.

The West. Two western provinces — Manitoba and Saskatchewan — currently receive equalization. In Manitoba's case, the ratio of direct transfers to expenditure is about 25 percent, while in the other three provinces it is between 12 and 18 percent.

Because of strong spending growth, Manitoba's transfers were less important as a share of expenditure in 1989 than in 1981; in the other three western provinces, transfers became more important. Special factors, rather than traditional funding, account for some of this development. In the wake of the 1986 energy price collapse, British Columbia and Alberta qualified for the Revenue Stabilization Program. After the softwood lumber dispute with the United States, the federal government was obliged to levy an export tax on lumber exports from British Columbia, until the provincial government raised its stumpage charge; the revenue was turned over to the province for its forestry program.

Another reason for British Columbia's relatively high ratio of transfers to expenditure is the generosity of its welfare programs, which the federal government funded on a 50–50 basis until recently. As already noted, this type of funding is biased in favor of provinces that can afford to, and do, operate generous welfare programs.

Concluding Comments

Fiscal prudence requires that provincial governments not allow their debt burdens to reach a level at which they become a constraint on program expenditure, or push tax effort to an unreasonable level.

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[41] These figures are adjusted to include the cash value of the additional tax abatement that Quebec was given when it opted out of various shared-cost programs.

Virtually all governments in Canada would champion such a rule (even if political realities prevent them from following it). A second aspect of fiscal prudence is surely the linking of government expenditure to the size of the economy. The problem is that, while identifying a responsible debt-to-GDP ratio is difficult, saying what expenditure-to-GDP ratio is appropriate is virtually impossible. Nevertheless, governments need to justify the share of the economy that their spending takes on an ongoing basis. As noted in Chapter 2, there has not been a major national addition to the menu of provincial government services since the early 1970s, yet the ratio of PLH-sector expenditure to GDP rose in most provinces until the mid-1980s.[42] It continued to rise in the prairie provinces until 1989.

A number of forces work toward keeping PLH-sector expenditure growing at least at the same pace as the provincial economies.

Political Considerations. Political factors such as election cycles have certainly played a part. Changing circumstances that reduce the demand for one government program are frequently seen as a politically useful opportunity to fill the reduction in expenditure by increases in another area.[43]

Revenue Growth. Buoyant revenue growth tends to lead to an increase in expenditure growth. The most obvious provincial example was the increase in Alberta's expenditure when its resource revenue was climbing during the 1970s and first part of the 1980s.

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[42] Some provincial governments felt the ratio should have declined in the 1980s. For example, Manitoba's minister of finance said in 1978 that his government was committed to the principle of fiscal responsibility, which meant, among other things, aiming "to reduce the public sector's share of Gross Provincial Product over time." Manitoba, Budget Address, April 10, 1978, p. 7.

[43] For example, Kwon suggests a correlation of expenditure increases with the year of and the year preceding an election in Saskatchewan. O. Yul Kwon, "Saskatchewan," in McMillan, ed., *Provincial Public Finances*, vol. 1, *Provincial Surveys*, p. 217.

Windfalls. Governments find ways of spending windfall revenue — from unexpected economic growth, an unanticipated increase in resource prices, or an upward revision in the estimate of transfers from the federal government — rather than using them to reduce deficits or taxes. For one thing, as Richard Bird observes, "Once taxes are imposed, they take on a life of their own."[44] For another, unexpected revenue often coincides with an unexpected "need." Among the many examples of such incidents: Nova Scotia spent most of its fiscal dividend in 1988,[45] as did Ontario in 1986 and again in 1988.[46] British Columbia spent its resource dividend in 1980 and later used its Stabilization Fund to switch a "revenue windfall" from 1988 to 1989 to finance "essential social service expenditures [that] must be increased significantly."[47]

The Temptation of Deficit Financing. When the trend in revenue growth slowed in the 1970s, more provinces became willing to accept chronic deficits rather than restrain expenditure growth or increase taxes enough to match expenditure rises. Even when financial markets exerted some discipline, a greater weight was put on tax increases than on cuts in program expenditures. This is not to say that slowing revenue growth did not exert a downward force on expenditure growth. But the delay in dealing with growth disparities led to situations in which it was politically impossible to introduce major program changes, while the impact of the usual cyclical setbacks on debt service made constraining total expenditure growth very difficult.

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[44] Richard M. Bird, *Financing Canadian Government: A Quantitative Overview* (Toronto: Canadian Tax Foundation, 1979), p. 92.

[45] Nova Scotia, Budget, 1989, p. 5.

[46] Ontario's revenues came in $1,272 million higher than originally forecast for 1986/87, but only $233 million was used to reduce the deficit. Ontario, Budget, 1987, p. 19.

[47] See Cutt, "British Columbia," p. 305. The province had transferred a $538 million "revenue windfall" from 1988 to its Budget Stabilization Fund, but in 1989, $500 million of this amount was added back to the general revenue fund. See British Columbia, Budget, 1989, p. 6. Kwon notes expenditure increases in Saskatchewan in 1974 and 1975 because of the resource boom's effect on government revenues. "Saskatchewan," p. 217.

Recommendations

The 1981–82 recession created a fiscal shock of major proportions for many provinces. Even though the 1970s had been gradually revealing a plethora of weaknesses throughout the Canadian fiscal system that would eventually plunge some governments into a fiscal quagmire, few governments planned with the probability of such a collapse in mind. Through the rest of the 1980s, therefore, the provinces lived under a credit-rating cloud that forced them to deal with new expenditure or taxes in terms of the likely effect on their balance sheets. Unfortunately, although the 1982 debt shock forced the provinces to be more fiscally responsible, it primarily generated a series of *ad hoc* measures designed to produce an appropriate bottom line.[48]

The present weight of tax burdens in all provinces is finally making it difficult for governments to contemplate further increases in their expenditure-to-GDP ratios. Those provinces that still have sizable deficits will also find it difficult to avoid further tax hikes during the next expansion.[49]

- The size of health-care spending and its rise in importance relative to the economy since the early 1970s in most provinces points to the urgent need to deal with federal-provincial funding and to experiment with alternative delivery systems.
- The chronic variations in unemployment rates and welfare problems across the country need to be addressed by improving

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[48] An example was the Ontario government's innovation in 1986 of "Estimated Year-End Saving," repeated in a more formal manner in 1987 as "Total Expenditure Savings and Constraints"; it targeted a level of expenditure reductions that were expected to be achieved in unspecified programs throughout the year. Ontario, Budget, 1986, p. 54; Ontario, Budget, 1987, p. 20.

[49] Meanwhile all the provinces must survive what has become a major downturn lasting well into 1991. What are they to do? Automatic increases in the PIT relative to income because of the incomplete inflation indexation of the system will help, but they are not likely to be sufficient to meet the shortfalls in such provinces as Nova Scotia, Quebec, Manitoba, and Saskatchewan.

labor mobility and investment in human capital and by restructuring the network of income-support programs. First, however, governments should clearly articulate their goals.

- The rise in social service spending in so many provinces needs to be addressed if other demands for government programs are not to force up tax or debt burdens. Of particular concern is the size of spending relative to the strength of the economy in Newfoundland, Prince Edward Island, and Quebec, and the rate of growth of this function in Ontario.
- All subsidy programs should be phased out. The prairie provinces, with their high per capita transfers to business, should act more quickly than the other provinces in this area.
- Public-sector wages need to bear some relation to comparable occupations in the private sector as well as to conditions of supply and demand. Governments need to seek ways of making labor markets work better in the public and para-public sectors. Of particular concern is the long-term record of public-sector inflation in Ontario.
- Each province needs to consider the contribution made by the provincial-local sector to the tax burden of its residents in light of competing jurisdictions, especially in the United States. Ontario presently has the worst problem, but Quebec, Manitoba, and British Columbia also need to consider the risks of trying to squeeze even more revenue out of their economies.
- Provinces with a large proportion of their spending going to debt service — Newfoundland, Nova Scotia, New Brunswick, Quebec, and Manitoba — need to be single-minded in their efforts to reduce their debt levels.
- All provinces should move to harmonize their retail sales taxes with the federal goods and services tax. They should, however, resist the temptation to build in an increase in their overall revenue unless their debt burden is serious and expenditure reduction has been exhausted. In this case, the tax increase should be done openly and reversed as soon as the debt ratio has been put firmly on a downward trend.

- Provinces should adopt accounting systems that are more transparent. Special funds may make it easier to sell fiscal prudence to legislators, but they should not obscure the actual revenue, expenditure, and deficit of each fiscal year.

Without these measures, the cycle of rising expenditure-to-GDP ratios, recurring deficits, rising debt-to-GDP ratios, and tax increases will likely be repeated in many provinces. In those provinces where the need to increase the PLH sector's competitiveness is not taken seriously and where the public sector's infrastructure does not adequately support the private sector, there will be a loss of economic activity to neighboring provinces or states, leading to a reduction in the standard of living.

5 The Politics of Deficits

Canada's federal and provincial governments undoubtedly will emerge from the 1990–91 recession with debt-to-GDP ratios that are even higher than they were at the end of the 1980s. The sluggishness with which most governments moved to reduce their debt burdens after the 1981–82 recession has intensified their problems in the current recession and risks hurting the ensuing expansion.

During economic emergencies such as recessions or sectoral failures in Canada, the federal government is expected to bear the brunt of stabilization. Yet there is no formula for provincial governments to reverse the process once the crisis is over. In general, during the past 15 years, both levels of government could have been more perspicacious in avoiding a proliferation of programs and the escalation of costs, and could have dealt with needed revenue increases in a more timely fashion. However, the failure on the part of the provinces to recognize that the federal deficit and debt problem was national and, therefore, partly theirs has not served Canadians well.

A particularly heavy responsibility for supporting federal countercyclical policy must rest with those provinces that make up a substantial proportion of the national economy. The wealthier the province, *the more it should be expected to contribute to public-sector saving during an expansion. Therefore, although some provinces appear to have been running more prudent fiscal policies than others because their debt-to-GDP ratios were low, all the provinces should be judged imprudent since they did not do as much as they could have to ameliorate the pressure on domestic savings stemming from public-sector deficits.*

Fiscal responsibility on the part of Canadian governments requires a great deal more intergovernmental cooperation as well as a higher level of accountability to the public. The issues that need to be addressed include developing a standard public accounting system that will encourage sounder planning and greater fiscal clarity. Longer-term fiscal strategies — strategies that are adhered to — are also needed. Regardless of the outcome of the next few years' constitutional consultations and negotiations, the sooner the two levels of government come to an agreement on how to put the country's public-sector balance sheet onto a stable basis, the sooner interest-rate spreads against Canada's trading partners will narrow. And the sooner Canadian governments clarify for their residents the connection between taxes and public services, the sooner the social contract will be renewed and the less likely a taxpayers' revolt will become.

* * * *

The chronic deficits that have been a feature of Canada's fiscal policy for more than a decade appear to be related to government expenditure's increasing share in economic output over about four decades. Yet when Canada is compared with most of the other countries of the Organisation for Economic Co-operation and Development (OECD), its fiscal capacity appears to have been ample enough to have prevented the deficit and debt problems of the 1980s. If Canadians like the present level of public services, why do they appear to resist paying their full cost?

International Comparisons

Compared with a group of 18 other OECD countries, Canada saw its general government deficit go from below average during the 1976–81 period to above average during the 1984–88 period. Although it is tempting to link the size of debt — that is, the existence of persistent deficits — with the size of government, as represented by expenditure-to-GDP ratios, the evidence is inconclusive. Canada's total public-sector outlays rose faster than GDP between the mid-1970s and the mid-1980s, yet the ratio remained at about the average of the same OECD group. Although half a dozen of the OECD countries have a rough negative correlation between deficit size and expenditure relative to GDP, several others, particularly the Scandinavian countries, show no relationship, ruling out a generalization. There is a somewhat stronger correlation between the change in expenditure over a long period and the subsequent size of the deficit, but again there are exceptions, including not only the Scandinavian countries but also Japan and the United States.

What is better associated with the size of the fiscal balance in the 1980s is income, measured by per capita GDP. Yet neither the United States nor Canada shows this relationship.

Perhaps the level and rate of expenditure increase as well as fiscal capacity combine with political factors, such as an implicit social contract, to influence the direction of fiscal balances. This seems the only way to explain why Sweden, which has a reputation for being extremely interventionist, had one of the smallest debt ratios in the OECD samples, while the United States, which has the opposite image, had the fifth-largest debt ratio.

Source: Organisation for Economic Co-operation and Development, *Economic Outlook*, no. 47, June 1990, Table 33, p. 119.

Perhaps the explanation lies in the absence of a social contract between Canadian taxpayers and their governments. If an increase in expenditure responsibilities can take place without any debate about the financing, there is a threat to the social contract, which requires that the public collectively agree to give enough of the national income to the government to pay for services.

A major factor in the weakening of whatever social contract may once have existed between Canadian voters and their governments has been the repeated resort to deficit financing by both Ottawa and the provinces. The growth of these deficits occurred primarily after the mid-1970s, but the problem is rooted in the 1960s and early 1970s, particularly in the inflation that appeared at that time. The coexistence of inflation and a progressive tax system not fully adjusted for inflation caused "bracket creep" to increase the income elasticity of government revenue. Thus, tax revenue rose without the need for governments to put forward legislation to increase taxes. From the mid-1960s to the early 1970s, Canadian government expenditure rose faster than economic growth, yet a deficit did not arise. Without the "windfall" revenue, expenditure increases might have been more modest or significant deficits might have arisen earlier or tax increases might have been proposed. The point is that the public — and more than a few bureaucrats and politicians — lost the habit of remembering that responsible fiscal government has the voters agree whether to pay for new or expanded services (or an increase in the cost of existing services).

The social contract was weakened further through the rest of the 1970s, when governments resorted more and more frequently to deficit financing rather than face the voters with the need for discretionary tax increases. In 1973, the "automatic" revenue increase was eliminated by indexation of the personal income tax system. At the same time, major programs were indexed to inflation, which also has an indirect impact on other program expenditure and debt service. As a result, expenditure rose more rapidly than revenue. Yet few program cutbacks were initiated, and adequate discretionary tax increases were not introduced to offset the dampening effect of indexation on revenue growth. In fact, the diverging trends of expenditure and revenue, particularly at the federal level, were exacerbated by tax cuts and spending increases in the rest of the 1970s. Consequently, the aggregate deficit began to grow rapidly after the mid-1970s, and the link in voters' minds between spending and tax increases was weakened further.

The service costs of rising debt burdens simply worsened shortfall problems. Eventually, of course, the interest payments of Canadian governments became a constraint on public policy, and financial markets became increasingly less forgiving in their assessment of the creditworthiness of new public borrowing. At this point, which occurred in the 1980s, governments were forced to consider both revenue enhancement and expenditure restraint.

After years of "underbilling" for government goods and services, it is not surprising that Canadian politicians faced intense hostility toward tax increases from voters in general. Governments, therefore, had to juggle this antagonism, the power of particular interest groups in lobbying to retain programs, and the business sector's preference for expenditure reductions.[1] Considerable sectoral resistance to program cutbacks forced governments to be quite creative in finding ways to hold back the cost of existing programs.[2] The political difficulty of making timely inroads into expenditure growth forced governments to rely heavily on tax increases in the 1980s.

Some advocates of "small" government — that is, government with low expenditure and revenue ratios — have promoted a constitutional limit on the total amount of taxation that may be levied. They argue that a restriction on revenue growth would be effective in limiting the size of expenditure — and, therefore, deficits — since, when expenditure grows faster than revenue, the ensuing deficits are assumed to force a reduction in expenditure growth. (In the case of central governments, which have the power to print money, an additional constraint on expenditures would have to apply.)[3] Although Canada has no formal mechanism to restrain revenue growth, political factors have effectively dampened it for most of the past 15 years. Nonetheless, events have shown that whatever link there is between deficit financing and the restraint of expenditure growth, it works with a very long lag in Canada.[4] The tardiness of most Canadian governments in decisively tackling their deficit problems suggests a failure to recognize the importance of forging a social contract by overtly linking expenditure and revenue on an ongoing basis.

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[1] See Canada, Department of Finance, *The Fiscal Plan*, Ottawa, February 10, 1988, pp. 39, 43. The Mulroney government has gone to great pains to prove that it has tackled deficits more on the spending rather than on the revenue side, while attacking popular programs indirectly or at the margin. The use of tax expenditures and creative accounting has unfortunately clouded the picture. For example, refundable tax credits appear to reduce revenue although they are, in fact, expenditure increases. On the other hand, the clawback of old age security benefits seems to increase revenue although it really reduces expenditure.

[2] One example is the federal government's modification of the indexation factors of such transfers as family allowances and payments to the provinces for established programs.

[3] See, for example, Milton Friedman, *Free to Choose* (New York: Avon Books, 1981), pp. 289-292.

[4] The small-government school did not anticipate the tolerance by governments, the public, and financial markets of chronic, sizable deficits.

Guidelines for Fiscal Prudence

Although there is no consensus about what level of public indebtedness is appropriate or prudent, there are good reasons to be concerned about persistent increases in the debt-to-GDP ratio.

- Rising debts mean rising debt service. When the interest rate on outstanding debt is higher than the rate of economic growth, the interest component of government expenditure becomes a constraint on fiscal policy.
- If the debt ratio rises during an expansion but private-sector saving does not rise to offset an aggregate government-sector deficit that continues to increase or is reduced too gradually, either private investment will be crowded out or the country will increase its foreign indebtedness.
- The accumulation of foreign debt means that a share of future GDP will go to foreigners in the form of debt service.

These facts suggest the need for restraint on the part of all of Canada's debt-ridden governments. Yet surely that statement is insufficient since it does not specify what sort of restraint applies when or how. As Maslove comments:

> "Restraint" is sometimes defined by finance ministers as exercising "fiscal responsibility" and practicing "prudent financial management policies." In this sense, all budgets are restraint budgets, since all finance ministers wish to avoid both undue pessimism and wild overoptimism when preparing their budgets.[5]

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[5] Allan M. Maslove, Michael J. Prince, and G. Bruce Doern, *Federal and Provincial Budgeting* (Toronto: University of Toronto Press, 1986), p. 205.

Statements advocating budgetary restraint, fiscal prudence, or responsibility risk becoming no more than "motherhood" statements. Clearly, therefore, they need to be associated with some concrete guidelines.

Some Suggestions from Economists

Although few economists offer a hard-and-fast definition of what constitutes fiscal prudence, a large proportion of them agree that a rapidly rising debt-to-GDP ratio constitutes imprudent fiscal policy except in times of recession and a declining ratio would be prudent during strong growth periods. The difficulty in obtaining a consensus arises in selecting the appropriate criteria for a "correct" ratio.[6]

Bruce and Purvis have worked at developing a framework for determining prudent fiscal policy.[7] They conclude that "until a program is accepted that restricts the tendency of governments to allow their implicit target debt-to-GDP ratio to ratchet up in response to short-run policy needs, the demise of the annually balanced budget as a medium-term anchor is also the end of fiscal prudence."[8] They then criticize the absence of any future obligation to reduce a ratio that has risen in response to short-run economic and political demands. It is not prudent, they say, to accept a short-run increase in the debt-to-GDP ratio as a permanent upward shift.

The key points from the Bruce and Purvis work that would be useful guidelines for provincial fiscal policy are as follows:

- A long-term debt-to-trend-GDP ratio should be targeted.

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[6] Peter Dungan and Thomas A. Wilson, "Impact of Public Sector Wage Controls on Budget Deficits and Inflation," [Policy and Economic Analysis Program] PEAP Policy Study 85-3, Institute for Policy Analysis, University of Toronto, 1985, pp. 6, 8.

[7] Neil Bruce and Douglas D. Purvis, "Implementing a Prudent Fiscal Strategy over the Medium Term," in Jack A. Mintz and Douglas D. Purvis, eds., *Policy Forum on Macro Policy Issues in the Medium Term* (Kingston, Ont.: John Deutsch Institute, Queen's University, 1989), pp. 28–46. Although the authors were focusing on the federal level, their analysis can also be applied to the provincial level.

[8] Ibid., p. 9.

- Transitory deviations may be tolerated as long as there is a built-in plan to return to the long-term path.
- If a discretionary revenue decrease or expenditure increase is introduced, the government should simultaneously introduce a later payback.

What these guidelines imply is that prudent fiscal policy should embody the balancing of the budget over the business cycle.

To avoid overly harsh action, it may, however, be necessary and useful to redefine the concept of a budget balance over time. For example, the portion of interest payments that compensates investors for any inflation-caused reduction in the purchasing power of the principal could be financed by borrowing without violating fiscal prudence.

The Role of the Credit-Rating Agencies

Provinces that borrow in public markets are subject to the discipline of lenders, which take credit ratings into account in arriving at an appropriate yield. The criteria these agencies use to judge the creditworthiness of a borrower reflect their concern more with the ability to repay the debt than with the broader concept of fiscal responsibility or prudence that economists attempt to assess. Yet statements made by the credit-rating agencies suggest that their concerns are not so different from those of economists.[9] In recent years, agencies appear to have concluded that:

- simply balancing the operating budget is not necessarily being fiscally prudent;

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[9] For example, Maslove, Prince, and Doern report, "The New York credit-rating agencies have told governments in Canada that raising taxes to finance deficits, especially those generated by operating expenditures, is not fiscally responsible." *Federal and Provincial Budgeting*, p. 226.

- it is desirable for provinces to finance part of their capital expenditure with current revenue;[10]
- expenditure restraint is preferred to revenue increases; and
- governments should take advantage of expansions to reduce their outstanding debt.

Between July 1982 and October 1986, Standard and Poor lowered the ratings of eight provinces because progress in reducing their deficits had been uneven and incompatible with the general improvement of the Canadian economy.[11] In 1987, the agency noted that "financial flexibility had been reduced, which raises questions as to the provinces' abilities to prevent significant financial deterioration in future downturns."[12] Later the same year, Moody said: "Economic improvement is fine, but if it's not translated into improved finances, it's very difficult for us to warrant a credit change."[13]

The need to adhere to the expectations of the credit-rating agencies varies with the financial resources required by and available to the provinces and their enterprises. Since government enterprises are penalized by a reduction in the parent government's rating, the costs can be sizable. Just the fear of a downward revision of a credit rating may, therefore, induce a government to introduce tax increases at an inopportune time in terms of the economy. For example, in commenting on tax increases from 1981 to 1983, Quebec's finance minister remarked:

> There were some who maintained that these increases had become inevitable because of a wish to keep Quebec's credit from

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[10] Although credit-rating agencies consider capital projects to be "more legitimate items for debt financing" than operating expenditure, Standard and Poor points out that the use of capital spending as a countercyclical device, as in the Atlantic provinces, may make adjustment more difficult. It also notes, "While borrowing is recognized as appropriate for investment in fixed assets, the existence of pay-as-you-go financing of capital expenditures is viewed as a sign of financial strength." *Creditweek*, August 8, 1988, p. 10.

[11] New Brunswick's rating did not change. Standard and Poor does not rate Prince Edward Island.

[12] *Globe and Mail* (Toronto), "Report on Business," September 16, 1987, p. B16.

[13] *Globe and Mail* (Toronto), "Report on Business," November 27, 1987, p. B2.

> falling. And they were right. All the other tax increases — in Nova Scotia, in Ontario and in Manitoba, among others — originated with similar concerns. It is very difficult to ask any provincial government to maintain a sound financial position, free of tax increases, when on the one hand a bad economic situation joins forces with unemployment to dwindle tax revenue and, on the other hand, expenditures increase among other things as a result of high interest rates and the rise in the number of people receiving social aid.[14]

Ontario has been perhaps the province least concerned about changes in its credit rating. The primary reason was that, until 1989, it had access to such large pools of nonpublic funds — for example, the teachers' and public servants' pensions — that for most of the last two decades it had to borrow from the bond market only infrequently. (Ontario Hydro, which does need to borrow publicly every year, shortened the term of its borrowings in the 1980s.) Thus, the province's treasurer may have been right in maintaining in 1985, when the expansion was well under way and Ontario's relative independence of public markets had been reasserted, that a triple-A rating was not very significant in practical terms for the province and, therefore, should not be pursued as an end in itself.[15] Nevertheless, the agencies do provide the public with an independent assessment of a government's fiscal prudence, and changes in ratings are useful as early warning signals of the future financial health of a government. As Ontario premier David Peterson observed in 1988, when Standard and Poor restored that province's triple-A rating, a credit rating reflects confidence in or doubt about a government's fiscal management.[16]

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[14] Quebec, Budget, 1983, p. 10.

[15] Ontario, Budget, 1985, p. 16. The comment was made in response to the 1985 reduction in Ontario's credit rating. As if to demonstrate the province's independence of its rating, the budgeted deficit for 1985 was higher than for 1984. The justification given was the need to provide jobs, housing, and so on, even though real provincial growth for 1986 was forecast to be 2.4 percent, following an estimated 4.5 percent for 1985. In fact, Ontario's real GDP growth in 1986 came in at more than 6 percent.

[16] *Globe and Mail* (Toronto), July 6, 1988.

Summary and Policy Recommendations

Some Guidelines for Good Fiscal Management

The major target of long-term fiscal policy in the provincial-local-hospital (PLH) sector should be the net-debt-to-GDP ratio, defined to include all direct liabilities and those financial assets that have a high probability of being realized. (Unfunded liabilities of pension funds and workers' compensation boards should be recorded in order to be included in this ratio.) Governments should adopt a rule for the ratio, which should be targeted to decline during expansions. These targets should be made public in budget presentations in the context of a three- to five-year plan, which must, of course, be accompanied by an economic forecast for the same time horizon — a worst- and best-case scenario should be included.

Although good fiscal management cannot be rigidly defined, using the following guidelines would assist provincial governments in running a responsible fiscal policy for their entire PLH sector.

- Debt-to-GDP ratios should be reduced during an expansion. They should not be allowed to be ratcheted up because of an economic downturn; rather, there should be a built-in strategy for return to a prerecession track.
- In the absence of a clear rule on appropriate debt-to-GDP ratio levels, current budgets should be balanced over the province's business cycle.
- Clear rules on current and capital accounts are needed. For example, the capital account might include the inflation component of debt service and exclude capital transfers to corporations; the current account should then include capital depreciation. The capital account could be balanced over more than a business cycle.
- Governments should have a planning horizon of at least three years. If circumstances beyond a province's control negate the

Budget Stabilization Funds

A recent development in provincial fiscal management is the stabilization fund, a variant of heritage savings trust funds that does not depend on earmarked revenue sources. Such funds are worth drawing attention to because they seem likely to become a new kind of smoke and mirrors in the budget-balancing act.

British Columbia introduced two funds in 1988. The Budget Stabilization Fund is to "absorb fiscal shocks" and to assist the province in long-range financial planning;* the plan is to transfer revenues into the fund when they peak sharply and out in years of revenue shortfall to avoid borrowing or cutting back social programs. The Privatization Benefits Fund, to be fed by extraordinary receipts from sales of assets, is to generate income that becomes part of general revenue.

Manitoba followed in 1989 with a Fiscal Stabilization Fund to "be used as a fiscal shock absorber" and to help in long-term fiscal planning. The fund is to receive part of any exceptional increase in revenue, regardless of whether there is a deficit or not, as well as extraordinary revenue. Withdrawals are to be made if "revenue is constrained or there are exceptional expenditure requirements."**

The advantage of stabilization funds appears to be that they strengthen the hand of the finance minister in restraining the rest of government from using all windfall revenue for new program spending. What seems likely, however, is that they will provide an excuse not to reduce tax burdens or gross debt, and that rather than being used only to help finance deficits in a downturn, they will be used to support expenditure increases during expansions.

Certainly, the funds have already clouded the true fiscal positions of the governments of British Columbia and Manitoba. British Columbia forecast a budgetary shortfall of $375 million for 1989 but a balanced budget after applying the Stabilization Fund transactions. In 1988, there was a surplus of $316 million before the fund transactions and a $375-million deficit after. In Manitoba's case, the 1988 surplus of $48 million became a deficit of $152 million, while 1989 was predicted to show a deficit of $87 million instead of $137 million.

economic forecast and thus knock the budget off path, a plan to return to the original trajectory should be incorporated in the budget.

- Fiscal plans and budget statements should be transparent and consistent from year to year.
- Governments must keep in mind that the linkages between federal and provincial finances are many and complex, and that

Budget Stabilization Funds - continued

Although it is probably too early to judge the success of these funds in increasing fiscal prudence, it is instructive to look at Quebec, where an incident of "advance recorded expenditures" permitted similar switching of spending from one year to another. Quebec's auditor general commented:

> The advance recording of this additional expenditure jeopardizes the financial statements comparability. The changes in the budgetary operations deficit from year to year are not clear. This adjustment in the expenditure and annual budgetary operations deficit does not represent appropriately the continuity of the Government's transactions.
>
> For the reader, it is thus difficult with such an adjustment to appraise the accountability of the Government exclusively from the financial statements and to assess its performance.†

If interest earnings on a fund's accumulated assets are greater than what could be saved by paying down part of the debt, there may be a good economic argument for maintaining a fund.†† Yet the price is a loss of fiscal clarity, further weakening the link between government services and taxes in voters' minds.

* British Columbia, Budget, 1988, p. 17.

** Manitoba, Budget, 1989, p. 23.

† Quebec, Public Accounts, 1988-89, vol. 1, p. 42.

†† If there is no saving, it is difficult to make a case for adding even asset-sale proceeds, assuming the province's debt was increased to acquire the asset in the first place. Prudent management suggests that the asset sale should reduce the gross debt.

action by one level of government may affect, positively or negatively, the revenue of the other. If one level wishes to increase its revenue take from a particular source, it must take into account the total amount already raised by both levels relative to the activity taxed.

Fiscal Federalism

All provinces need to acknowledge the federal nature of the government of Canada's debt and the interdependence of federal and provincial fiscal policy. Thus, the flip side to federal support during crises and downturns would be provincial support for the federal government's deficit-reduction strategy during good times. (Certainly the ill effects of the continuing competition for domestic savings are felt by all sectors and all regions.) In other words, if the provinces expect the federal government to bear primary responsibility for stabilizing the economy during a national recession — as is the case with unemployment insurance operations — or in a regional downturn — as was the case with assistance to the oil sector — they should openly acknowledge that stabilization should also take place during expansions. This acknowledgment should then lead to provincial tax and spending initiatives that support, rather than hinder, the stabilization role of the federal government.

By necessity, the greatest responsibility for supportive action will fall on Ontario because it has the strongest and most stable economy. At no time was this prescription more valid than in the years between 1985 and 1988, when Ontario, as its government boasted, "experienced higher growth than any of the major industrialized countries"[17] — growth that played an important part in keeping inflationary pressure from falling and thus put pressure on the Bank of Canada's monetary policy. At the other end of the spectrum, Newfoundland and Prince Edward Island are too small to play more than a very marginal role. Saskatchewan had to struggle to recover from its particular mid-decade recession. Most of the other provinces, however, had either sufficiently strong growth or a sufficiently strong financial position to support the federal government to varying degrees.

What must not be repeated in the next expansion is the fiscal selfishness of the postrecession 1980s, when most of these provinces waited too long to restrain their expenditure growth — which did not look too out of line because of the strength of their expansions — and to balance their budgets. By the end of the 1980s, as fears of recession grew, it was too late for the provinces to take supportive action. Such provincial foot-dragging forced the federal government to continue to lean even more heavily on its transfers to the provinces. Further *ad hoc* adjustments to these transfers are likely to hurt more than proportionately.

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[17] Ontario, Ministry of Treasury and Economics, *Economic Outlook and Fiscal Review, Ontario 1989* (Toronto, 1989), p. 2.

Accounting-Transparency Issues

Before citizens can begin to evaluate the costs and benefits of government services, they need a clearer and more accurate presentation of the PLH-sector accounts than is now available. It should be fairly simple to make possible interprovincial comparisons of true tax burdens. If a government chooses to make a unique presentation to its legislators, it should also make available a set of accounts that is reasonably consistent with those of the rest of the country and with those of previous years.

The budget is probably the most important document that a province presents to its citizens, and more effort should be made to use it for an understandable accounting of the stewardship and future fiscal direction of the government. Even if there is a time lag, it should also include a PLH consolidated statement of revenue, expenditure, and net debt. To achieve these ends, provincial governments should seriously contemplate some changes to their accounting systems. For example:

- Depreciation of fixed assets should be included, with the original book value adjusted annually by an inflation index before calculating the depreciation.
- The real and the inflation component of debt-servicing and investment income should be recognized in the budget.
- Provincial governments and an independent accounting body should work out a consistent and prudent method of treating capital expenditure, taking into account the importance of investment (not only in fixed assets but also human capital).
- An evaluation of tax expenditure should be a regular feature of budgets, even if it can be only very approximate.

Concluding Comments

As the federal and provincial governments become more and more involved in the affairs of people and business, interest groups increasingly look to both levels of government to solve their economic problems. Like federal governments, provincial governments that are unable to come to terms with their limitations in helping firms and individuals to get through every economic shock or new development find themselves at the mercy of every interest group; the interests of society as a whole then receive a lower priority. Such governments risk losing control of their expenditure. Thus, some provincial governments in Canada have become caught up with deficit-financing as a way of life. Faced with a debt burden that is growing by leaps and bounds, they see tax increases as the only way out. If the tax burden in one province gets out of line with those of neighboring jurisdictions, however, another problem then looms that may be even harder to solve: a shrinkage of the province's economic base.

It is difficult for governments to keep to a prudent fiscal policy without rules. Without consitutional constraints, they are subject only to the discipline of the financial markets and the voters. History shows that these constraints are insufficient to ensure that governments act responsibly.

One weak link is the absence of a mechanism to enforce accountability and to run a cyclically adjusted balanced budget. Because the level of government that is responsible for spending or taxing is often obscure in Canada's federal system, it is often difficult for the taxpayer to know which government ought to be accountable for which action. The competition that such a system generates can be an advantage for the taxpayer in keeping the tax burden down, but it does not appear to have worked as well in keeping spending — and hence deficits — under control.

The challenge Canada now faces is to harness the benefits of competitive federalism without the costs of overlapping jurisdictions and overgovernance. Appendix B touches on some of these issues while giving an overview of the development of federal-provincial fiscal federalism.

Appendix A

Data on Provincial, Local, and Hospital Finances, by Province

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Newfoundland***

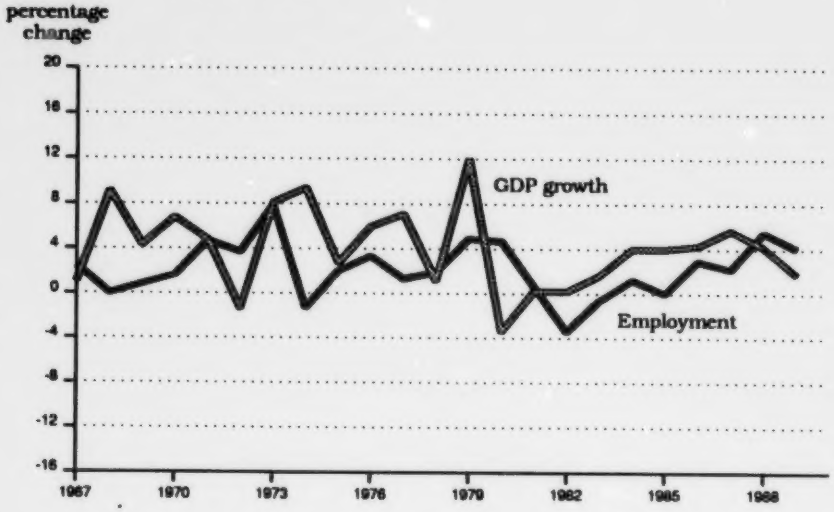

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Prince Edward Island***

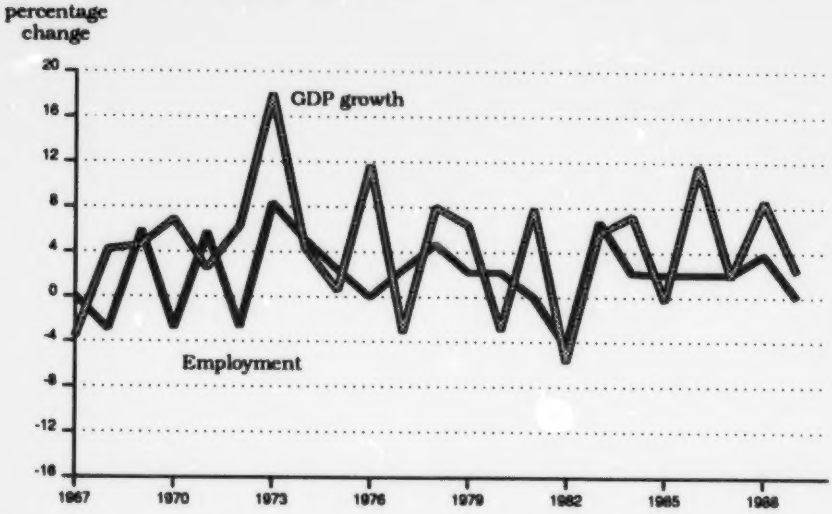

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Nova Scotia***

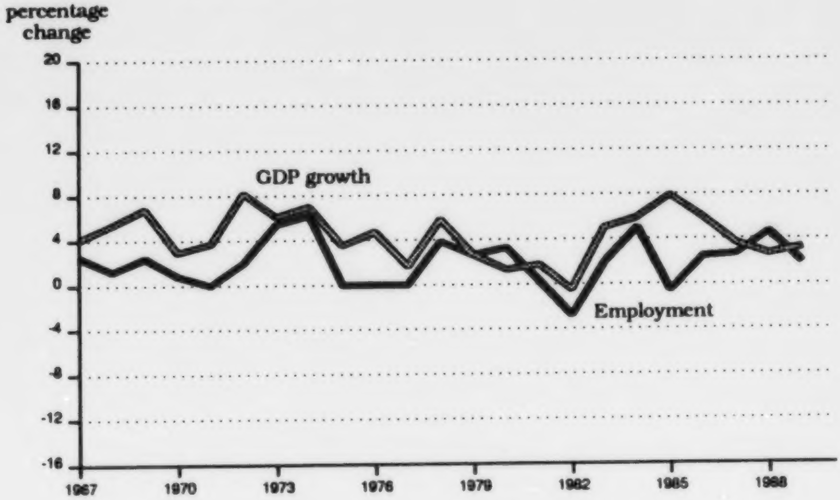

Figure A.1: ***Employment and Real GDP Growth, 1967–89: New Brunswick***

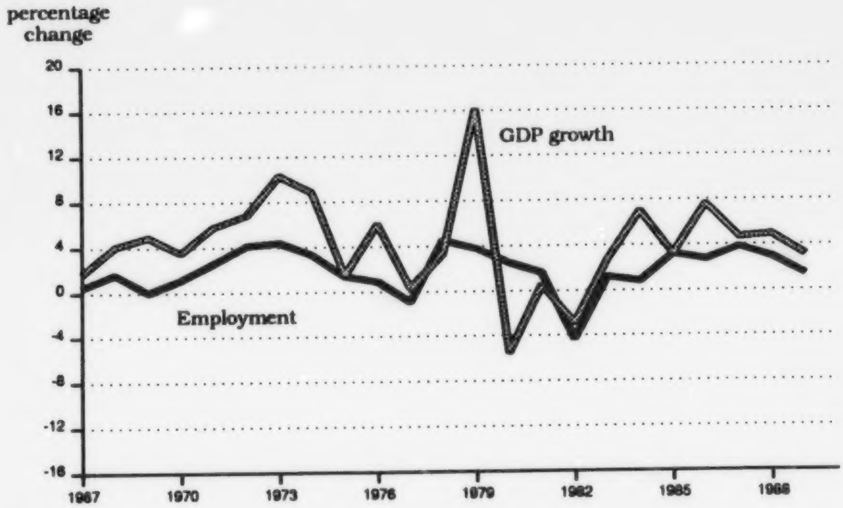

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Quebec***

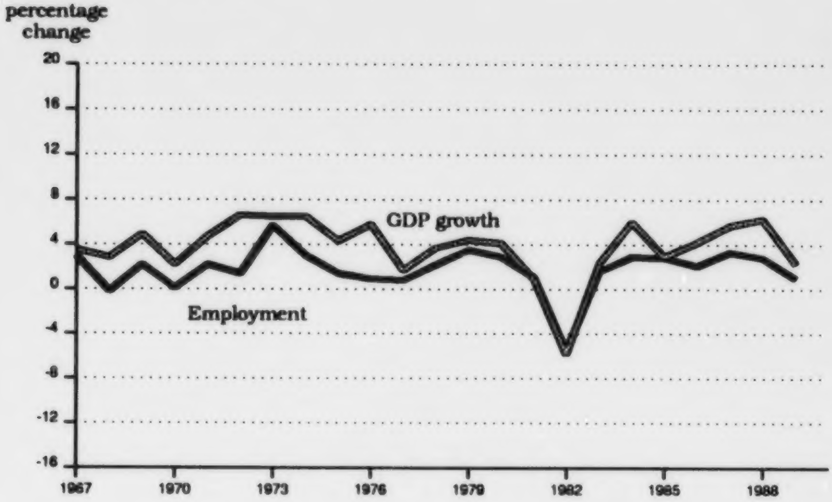

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Ontario***

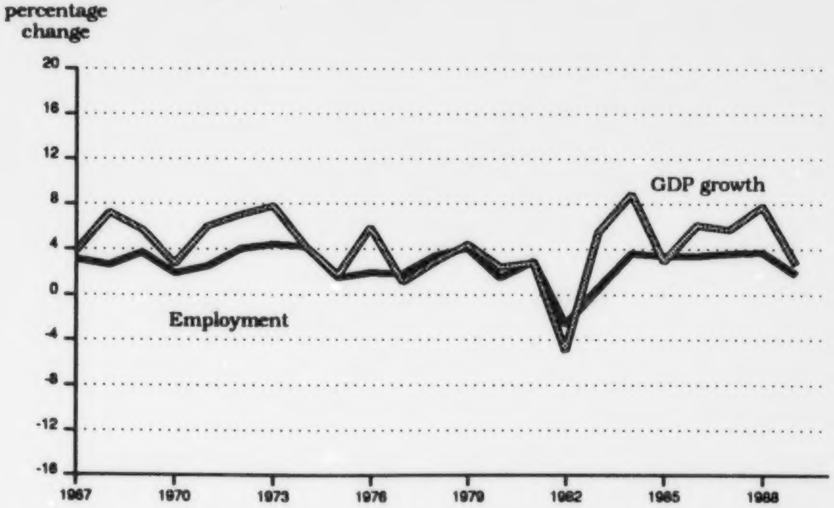

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Manitoba***

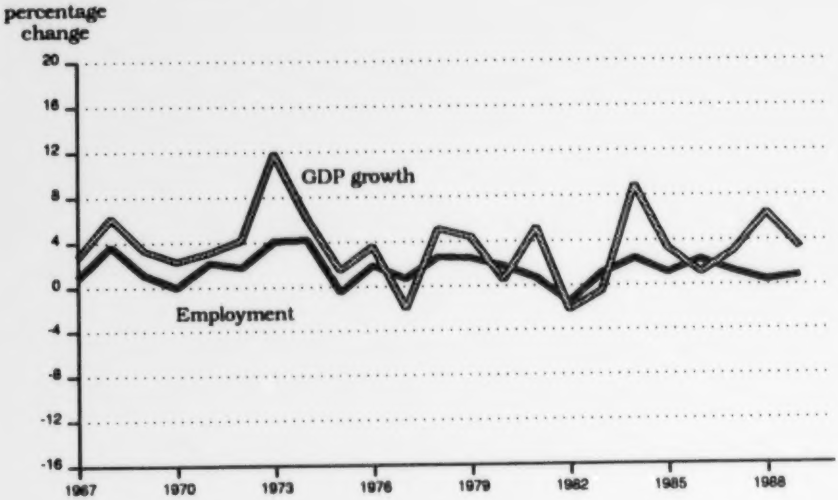

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Saskatchewan***

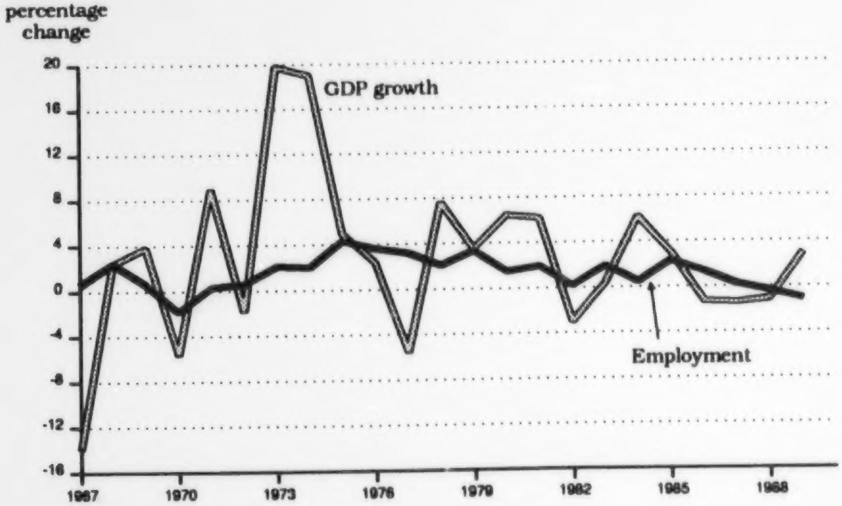

Figure A.1: ***Employment and Real GDP Growth, 1967–89: Alberta***

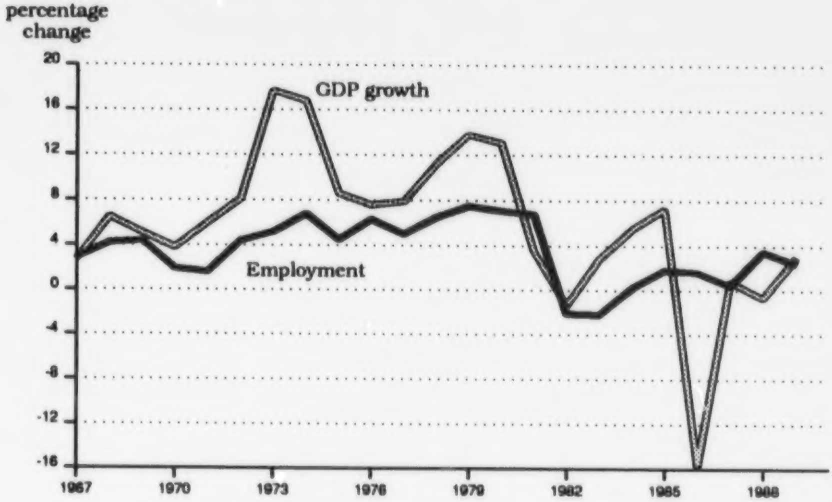

Figure A.1: ***Employment and Real GDP Growth, 1967–89: British Columbia***

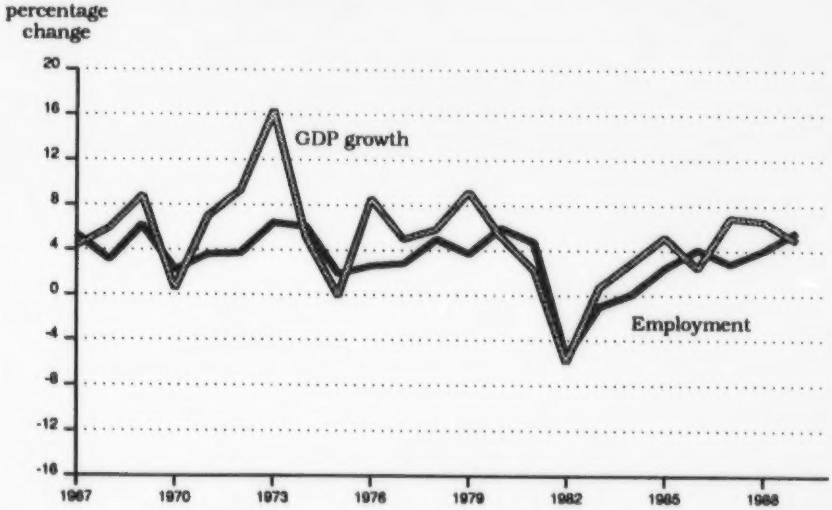

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Newfoundland***

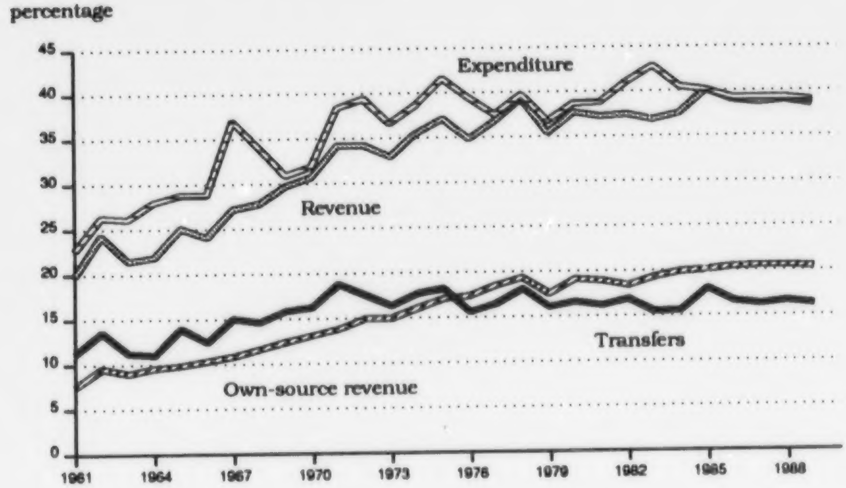

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Prince Edward Island***

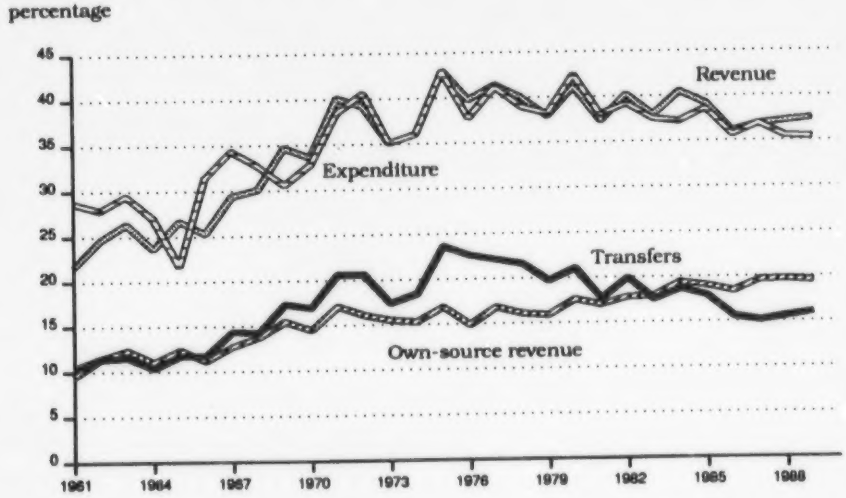

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Nova Scotia***

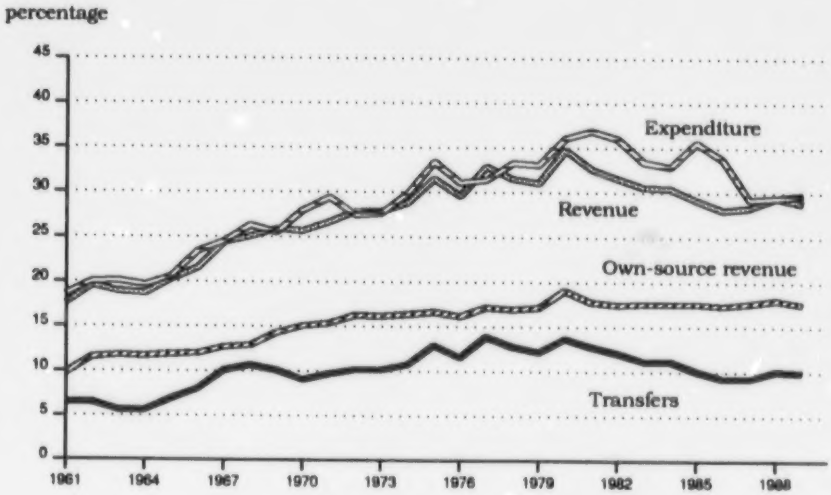

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: New Brunswick***

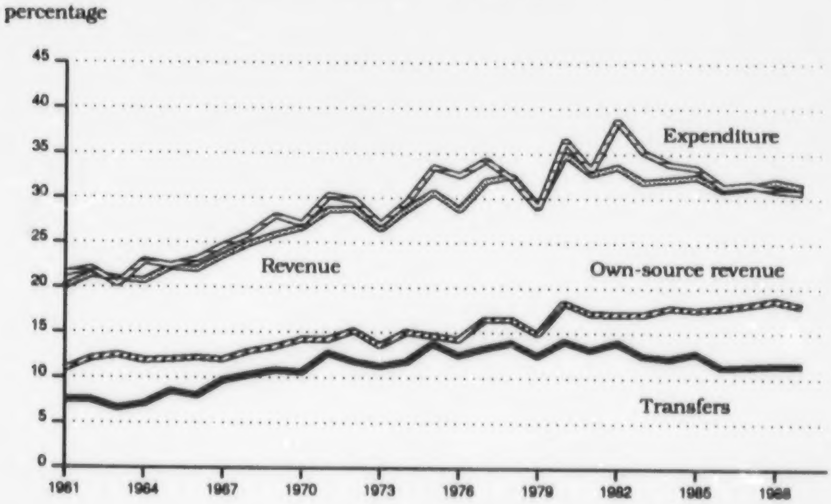

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Quebec***

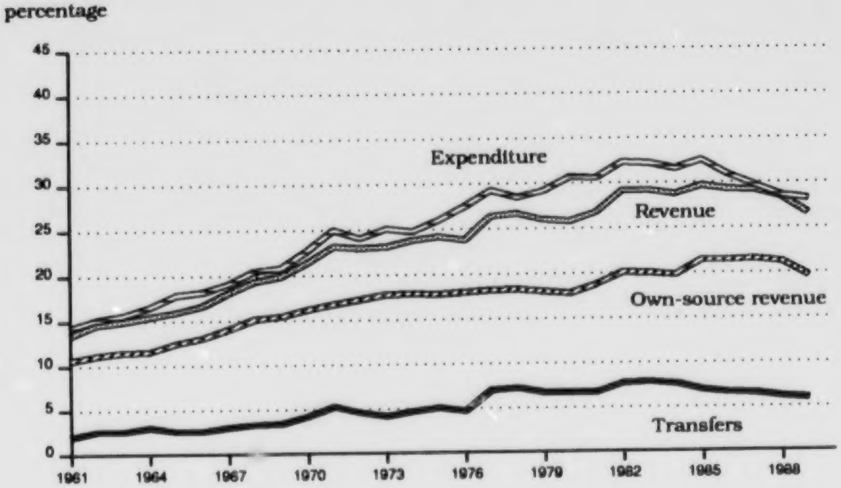

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Ontario***

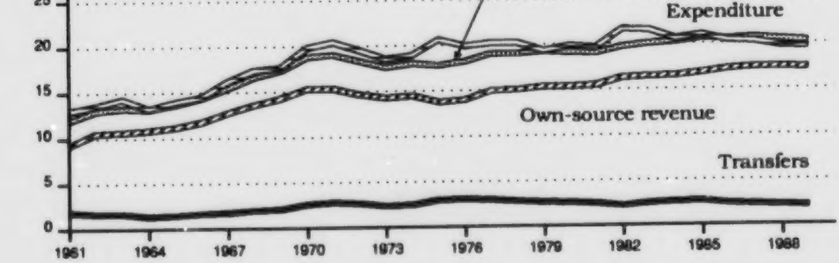

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Manitoba***

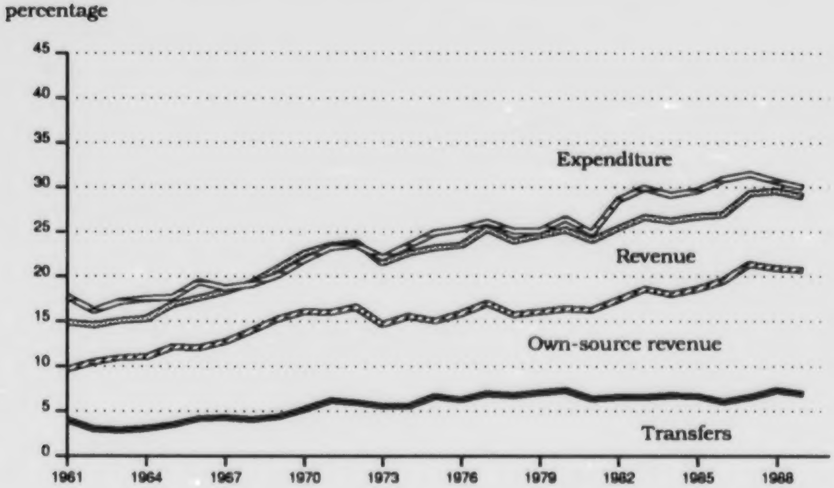

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Saskatchewan***

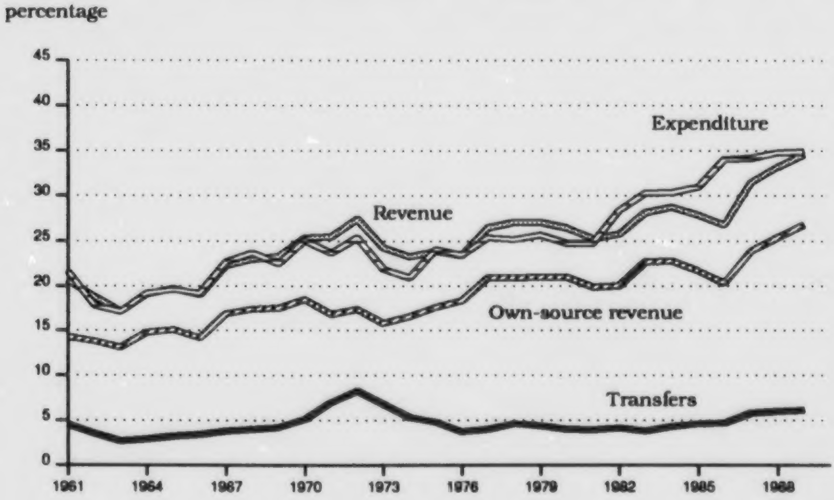

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: Alberta***

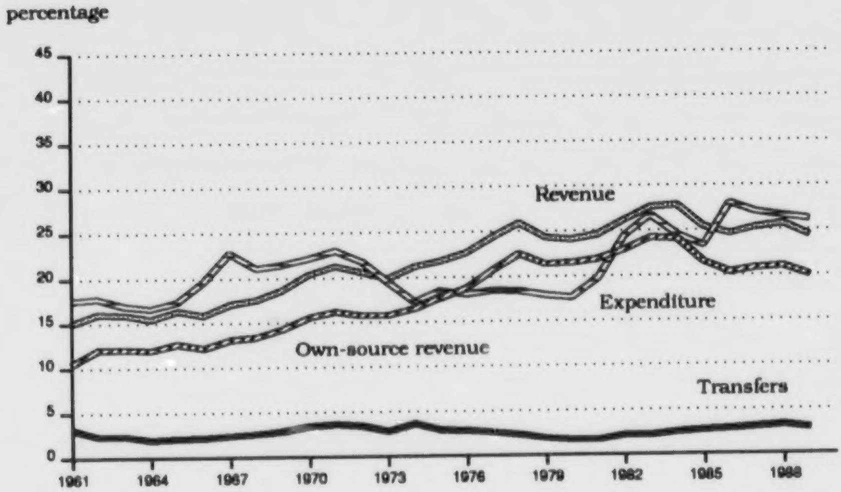

Figure A.2: ***Revenue and Expenditure as Shares of Provincial GDP (PEA basis), 1961–89: British Columbia***

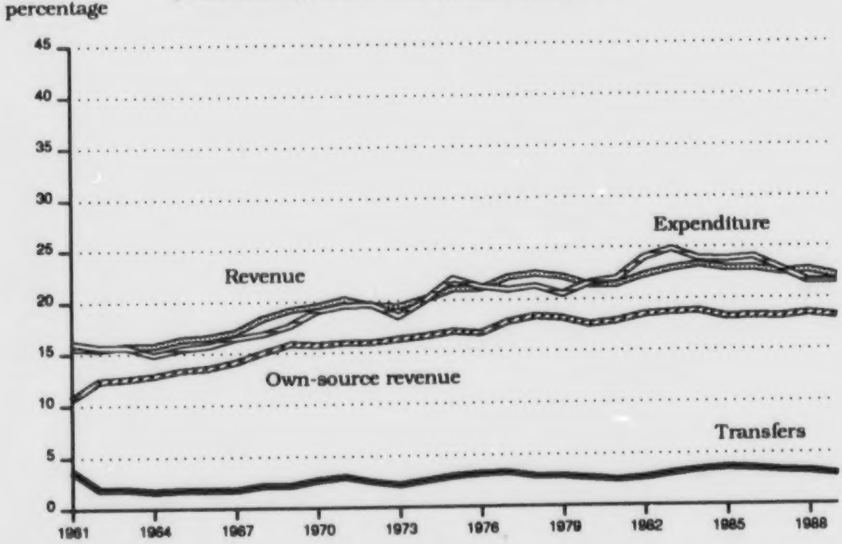

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Newfoundland***

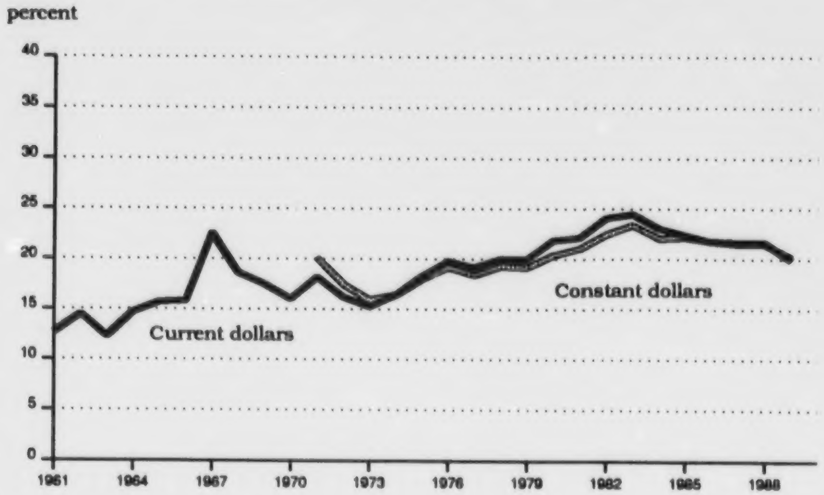

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Prince Edward Island***

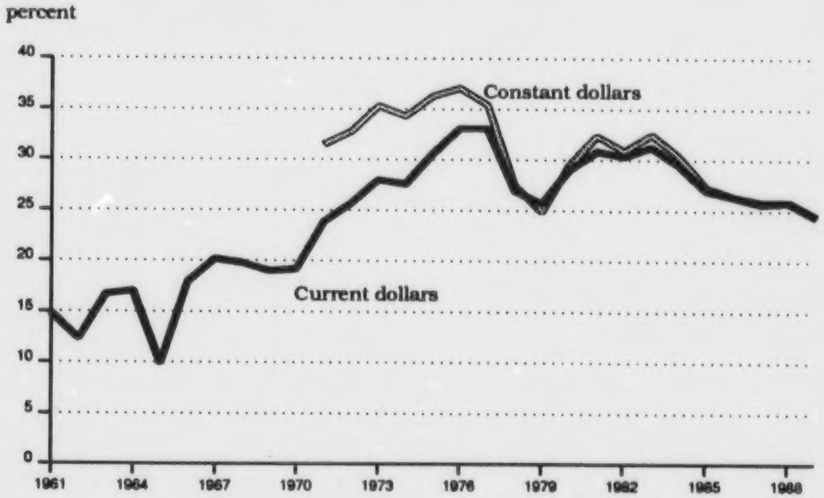

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Nova Scotia***

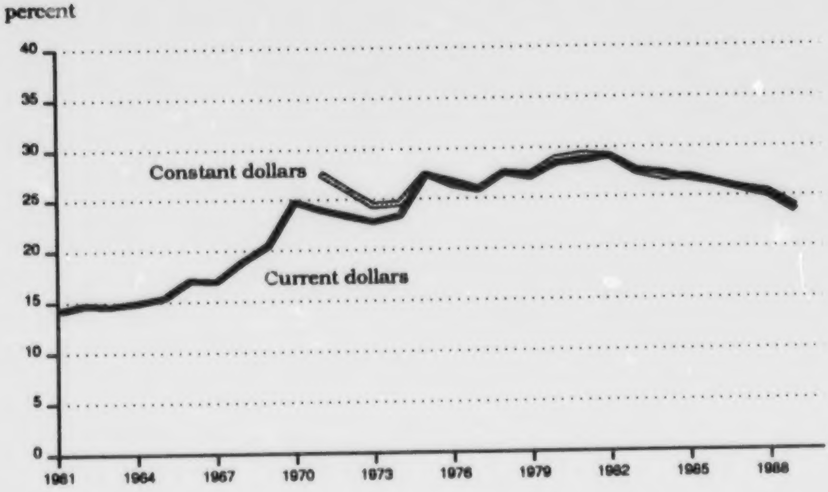

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: New Brunswick***

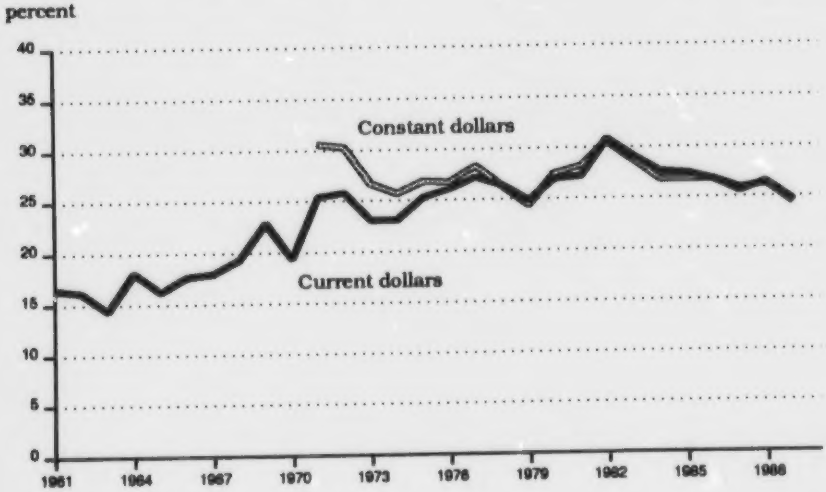

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Quebec***

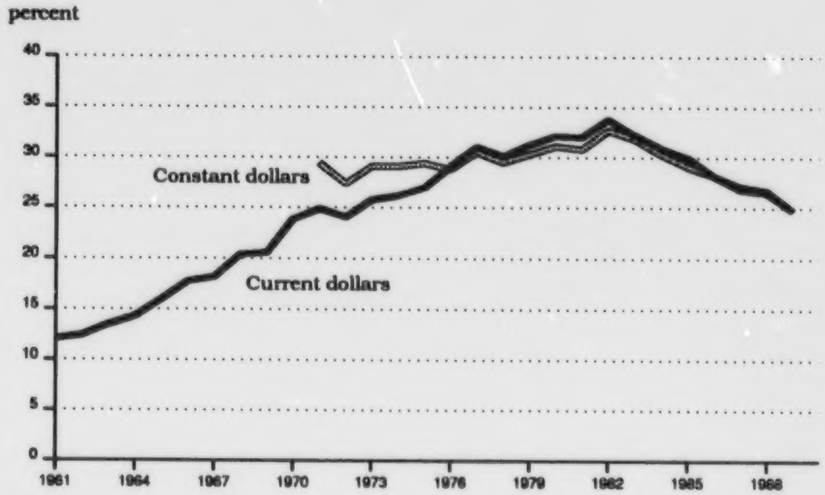

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Ontario***

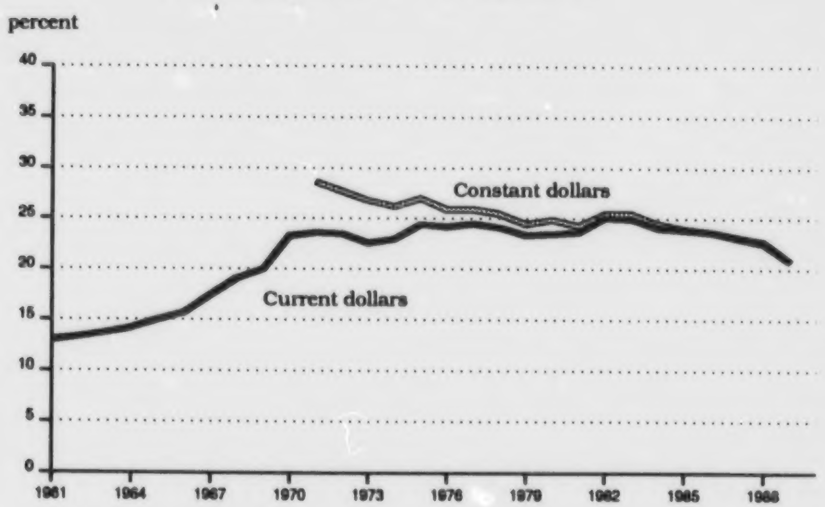

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Manitoba***

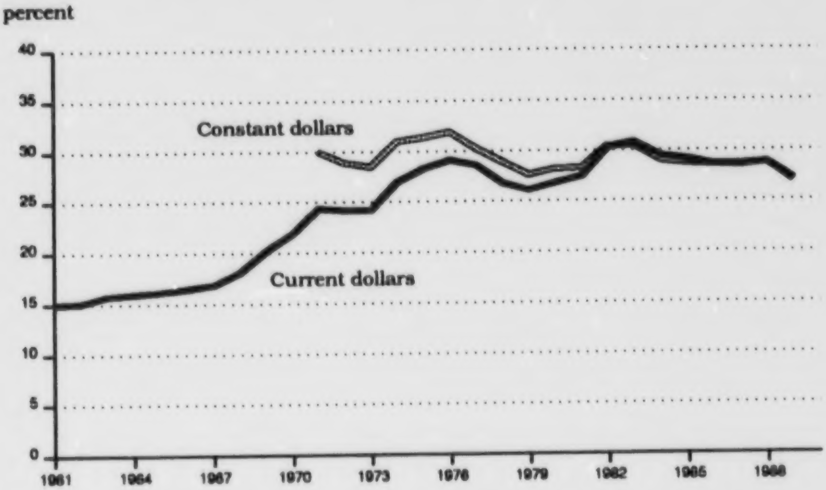

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Saskatchewan***

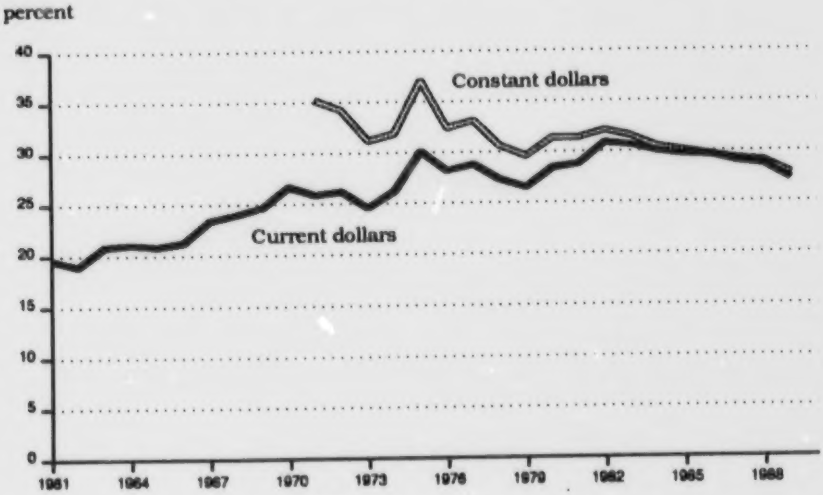

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: Alberta***

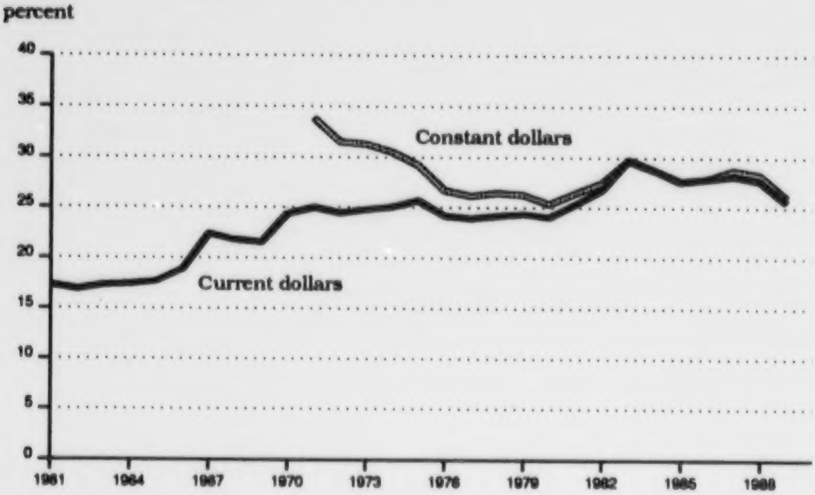

Figure A.3: ***Public Consumption as a Percentage of Private Consumption, 1961–89: British Columbia***

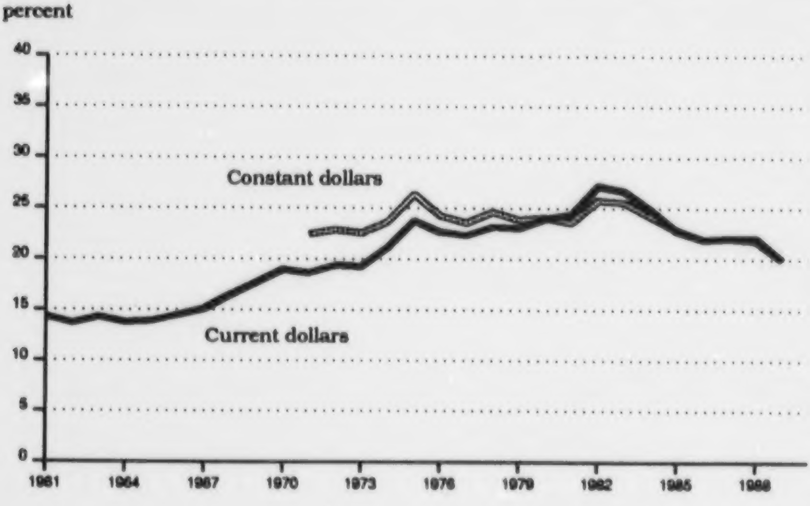

Table A.1: *PLH-Sector Revenue and Expenditure, 1980-89: Newfoundland*

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	4,095	4,643	5,059	5,485	5,947	6,368	6,782	7,385	7,912	8,406
Population (thousands)	566	568	566	571	572	572	568	568	569	571
Revenue										
Direct taxes on persons[a]	192	224	248	273	299	313	356	398	435	453
Direct taxes on corporations and government business enterprises	39	46	29	34	56	60	54	61	62	61
Indirect taxes	436	480	510	590	660	705	734	811	871	937
Other transfers from persons	15	14	17	20	20	19	19	21	21	24
Investment income	100	115	128	141	151	180	221	226	234	244
Transfers from federal government	681	752	855	848	925	1,149	1,128	1,204	1,311	1,366
Current revenue	*1,463*	*1,631*	*1,787*	*1,906*	*2,111*	*2,426*	*2,512*	*2,721*	*2,934*	*3,085*
Capital consumption allowances	81	96	105	112	120	128	130	134	140	149
Total revenue[a]	*1,544*	*1,727*	*1,892*	*2,018*	*2,231*	*2,554*	*2,642*	*2,855*	*3,074*	*3,234*
Taxation	682	764	804	917	1,035	1,097	1,163	1,291	1,389	1,475
Own-source current revenue	782	879	932	1,058	1,186	1,277	1,384	1,517	1,623	1,719
Expenditure										
Current goods and services	696	791	946	1,050	1,079	1,121	1,142	1,216	1,314	1,374
Transfers to persons[a]	461	510	572	683	642	679	719	803	873	918
Transfers to business	49	66	62	53	54	92	74	95	94	97
Interest on public debt	262	320	324	367	430	461	519	557	577	595
Current expenditure[a]	*1,468*	*1,687*	*1,904*	*2,153*	*2,205*	*2,353*	*2,454*	*2,671*	*2,858*	*2,984*
Capital formation	117	114	171	195	203	203	206	224	240	289
Total expenditure[a]	*1,585*	*1,801*	*2,075*	*2,348*	*2,408*	*2,556*	*2,660*	*2,895*	*3,098*	*3,273*
Surplus (deficit)	(41)	(74)	(183)	(330)	(177)	(2)	(18)	(40)	(24)	(39)

Table A.1: *PLH-Sector Revenue and Expenditure, 1980-89: Prince Edward Island*

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	846	1,009	1,051	1,165	1,297	1,320	1,498	1,587	1,781	1,807
Population (thousands)	123	123	122	124	125	126	127	127	129	130
Revenue										
Direct taxes on persons	41	39	43	48	58	63	73	87	100	104
Direct taxes on corporations and government business enterprises	5	6	5	5	8	7	12	16	17	16
Indirect taxes	79	94	106	118	136	134	142	157	176	189
Other transfers from persons	3	2	3	3	4	4	4	4	5	5
Investment income	21	31	30	34	45	43	44	47	53	56
Transfers from federal government	178	178	209	204	243	236	233	240	277	303
Current revenue	*327*	*350*	*396*	*412*	*494*	*487*	*508*	*551*	*628*	*673*
Capital consumption allowances	21	26	27	29	31	30	33	34	35	38
Total revenue	*348*	*376*	*423*	*441*	*525*	*517*	*541*	*585*	*663*	*711*
Taxation	128	141	157	174	206	208	231	264	298	314
Own-source current revenue	149	172	187	208	251	251	275	311	351	370
Expenditure										
Current goods and services	208	245	259	296	309	302	309	331	359	389
Transfers to persons	51	50	55	59	62	65	69	83	92	92
Transfers to business	11	7	9	9	14	25	34	31	37	38
Interest on public debt	33	43	49	50	62	62	64	69	77	83
Current expenditure	*303*	*345*	*372*	*414*	*447*	*454*	*476*	*514*	*565*	*602*
Capital formation	56	38	40	23	35	56	59	71	67	70
Total expenditure	*359*	*383*	*412*	*437*	*482*	*510*	*535*	*585*	*632*	*672*
Surplus (deficit)	(11)	(7)	11	4	43	7	6	0	31	39

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Nova Scotia***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	6,292	7,345	8,462	9,629	10,701	11,934	13,031	13,967	14,898	16,019
Population (thousands)	845	847	850	857	864	871	873	878	882	886
Revenue										
Direct taxes on persons[a]	360	374	414	490	544	604	679	765	838	855
Direct taxes on corporations and government business enterprises	69	62	50	55	78	84	96	118	120	116
Indirect taxes	624	662	778	888	978	1,118	1,167	1,240	1,351	1,463
Other transfers from persons	22	22	25	30	30	33	37	40	42	46
Investment income	125	185	217	228	251	262	293	313	339	340
Transfers from federal government	863	939	1,026	1,081	1,203	1,200	1,206	1,300	1,501	1,597
Current revenue	*2,063*	*2,244*	*2,510*	*2,772*	*3,084*	*3,301*	*3,478*	*3,776*	*4,191*	*4,417*
Capital consumption allowances	125	148	165	176	185	186	190	195	206	218
Total revenue[a]	*2,188*	*2,392*	*2,675*	*2,948*	*3,269*	*3,487*	*3,668*	*3,971*	*4,397*	*4,635*
Taxation	1,075	1,120	1,267	1,463	1,630	1,839	1,979	2,163	2,351	2,480
Own-source current revenue	1,200	1,305	1,484	1,691	1,881	2,101	2,272	2,476	2,690	2,820
Expenditure										
Current goods and services	1,486	1,695	1,872	1,983	2,184	2,342	2,407	2,508	2,616	2,874
Transfers to persons[a]	292	321	371	397	432	469	494	519	556	604
Transfers to business	105	133	164	158	152	131	97	107	155	157
Interest on public debt	227	298	406	467	529	581	622	648	676	694
Current expenditure[a]	*2,111*	*2,448*	*2,814*	*3,006*	*3,298*	*3,993*	*4,115*	*3,782*	*4,008*	*4,329*
Capital formation	160	263	233	214	225	251	278	316	385	441
Total expenditure[a]	*2,271*	*2,711*	*3,047*	*3,220*	*3,523*	*4,244*	*4,393*	*4,098*	*4,393*	*4,770*
Surplus (deficit)	(83)	(319)	(372)	(272)	(254)	(757)	(725)	(127)	4	(135)

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: New Brunswick***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	5,019	5,953	6,527	7,493	8,375	9,007	10,079	10,867	11,764	12,645
Population (thousands)	695	696	697	703	708	710	710	712	714	719
Revenue										
Direct taxes on persons[a]	254	317	357	363	421	443	506	571	651	670
Direct taxes on corporations and government business enterprises	69	58	37	49	77	72	78	102	110	105
Indirect taxes	478	508	550	682	787	850	956	1,026	1,122	1,179
Other transfers from persons	20	22	22	23	26	23	29	30	30	32
Investment income	103	117	150	163	181	199	227	247	284	300
Transfers from federal government	710	783	917	939	1,019	1,154	1,143	1,243	1,357	1,453
Current revenue	*1,634*	*1,805*	*2,033*	*2,219*	*2,511*	*2,741*	*2,939*	*3,219*	*3,554*	*3,739*
Capital consumption allowances	123	145	160	172	182	187	194	203	212	227
Total revenue[a]	*1,757*	*1,950*	*2,193*	*2,391*	*2,693*	*2,928*	*3,133*	*3,422*	*3,766*	*3,966*
Taxation	821	905	966	1,117	1,311	1,388	1,569	1,729	1,913	1,986
Own-source current revenue	924	1,022	1,116	1,280	1,492	1,587	1,796	1,976	2,197	2,286
Expenditure										
Current goods and services	1,097	1,229	1,494	1,579	1,641	1,772	1,794	1,920	2,099	2,266
Transfers to persons[a]	278	307	370	396	447	474	539	571	602	627
Transfers to business	44	41	80	72	81	62	60	73	85	97
Interest on public debt	158	155	269	299	342	378	421	468	515	529
Current expenditure[a]	*1,577*	*1,732*	*2,213*	*2,346*	*2,511*	*2,686*	*2,814*	*3,032*	*3,301*	*3,519*
Capital formation	259	244	313	288	326	330	347	420	356	375
Total expenditure[a]	*1,836*	*1,976*	*2,526*	*2,634*	*2,837*	*3,016*	*3,161*	*3,452*	*3,657*	*3,894*
Surplus (deficit)	(79)	(26)	(333)	(243)	(144)	(88)	(28)	(30)	109	72

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Quebec***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	72,220	81,513	86,228	92,274	100,991	107,944	117,493	129,593	142,417	151,801
Population (thousands)	6,386	6,436	6,462	6,475	6,492	6,514	6,540	6,593	6,641	6,692
Revenue										
Direct taxes on persons[a]	6,032	7,449	8,384	8,507	9,234	10,000	10,955	12,233	13,819	13,596
Direct taxes on corporations and government business enterprises	706	633	312	274	322	330	394	507	639	584
Indirect taxes	5,682	6,550	7,785	8,481	9,014	9,855	10,946	11,839	12,688	13,257
Other transfers from persons	486	518	575	637	705	708	818	841	884	873
Investment income	858	1,198	1,461	1,700	1,994	2,025	2,303	2,471	3,060	3,306
Transfers from federal government	3,941	4,427	5,457	6,070	6,475	6,624	6,127	6,336	6,760	7,024
Current revenue	*17,705*	*20,775*	*23,974*	*25,669*	*27,744*	*29,542*	*31,543*	*34,227*	*37,850*	*38,640*
Capital consumption allowances	938	1,092	1,204	1,286	1,368	1,431	1,481	1,534	1,623	1,728
Total revenue[a]	*18,643*	*21,867*	*25,178*	*26,955*	*29,112*	*30,973*	*33,024*	*35,761*	*39,473*	*40,368*
Taxation	12,906	15,150	17,056	17,899	19,275	20,893	23,113	25,420	28,030	28,310
Own-source current revenue	13,764	16,348	18,517	19,599	21,269	22,918	25,416	27,891	31,000	31,616
Personal income tax abatement	957	1,095	1,142	1,139	1,244	1,352	1,453	1,658	1,718	1,907
Taxation minus abatement	11,949	14,055	15,914	16,760	18,031	19,541	21,660	23,762	26,312	26,403
Own-source minus abatement	12,807	15,253	17,375	18,460	20,025	21,566	23,963	26,233	29,372	29,709
Transfers plus abatement	4,898	5,522	6,599	7,209	7,719	7,976	7,580	7,994	8,478	8,931

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Quebec - continued***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
Expenditure										
Current goods and services	13,418	14,938	16,814	17,589	18,595	19,705	20,613	22,154	23,542	24,681
Transfers to persons[a]	3,941	4,505	5,001	5,478	5,908	6,364	6,604	6,889	7,269	7,461
Transfers to business	658	756	892	1,125	1,264	1,609	1,548	1,447	1,573	1,606
Interest on public debt	2,315	3,046	3,537	3,749	4,135	4,700	5,147	5,587	5,632	6,049
Current expenditure[a]	*20,332*	*23,245*	*26,244*	*27,941*	*29,902*	*32,378*	*33,912*	*36,077*	*38,016*	*39,797*
Capital formation	1,808	1,684	1,644	1,814	2,056	2,756	2,425	2,393	2,683	3,055
Total expenditure[a]	*22,140*	*24,929*	*27,888*	*29,755*	*31,958*	*35,134*	*36,337*	*38,470*	*40,,699*	*42,852*
Surplus (deficit)	(3,497)	(3,062)	(2,710)	(2,800)	(2,846)	(4,161)	(3,313)	(2,709)	(1,226)	(2,484)

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Ontario***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	114,994	131,831	137,310	151,945	171,499	183,561	202,710	223,775	251,325	273,352
Population (thousands)	8,570	8,625	8,703	8,798	8,902	9,006	9,113	9,265	9,431	9,579
Revenue										
Direct taxes on persons[a]	4,231	5,208	5,834	6,558	7,679	7,961	9,599	11,336	13,378	14,166
Direct taxes on corporations and government business enterprises	1,319	1,261	1,020	1,214	1,523	1,804	2,264	2,526	2,814	2,718
Indirect taxes	9,131	10,236	11,688	12,948	14,512	15,916	17,472	19,457	21,539	24,150
Other transfers from persons	1,370	1,485	1,684	1,921	2,023	2,080	2,174	2,271	2,366	2,562
Investment income	1,642	2,189	2,199	2,243	2,632	3,065	3,278	3,399	3,561	3,808
Transfers from federal government	3,009	3,252	3,052	3,755	4,464	5,020	4,816	5,188	5,466	5,657
Current revenue	*20,702*	*23,631*	*25,477*	*28,639*	*32,833*	*35,846*	*39,603*	*44,177*	*49,124*	*53,061*
Capital consumption allowances	1,247	1,440	1,593	1,693	1,814	1,878	1,942	2,022	2,148	2,287
Total revenue[a]	*21,949*	*25,071*	*27,070*	*30,332*	*34,647*	*37,724*	*41,545*	*46,199*	*51,272*	*55,348*
Taxation	16,051	18,190	20,226	22,641	25,737	27,761	31,509	35,590	40,097	43,596
Own-source current revenue	17,693	20,379	22,425	24,884	28,369	30,826	34,787	38,989	43,658	47,404
Expenditure										
Current goods and services	14,945	17,077	19,443	21,514	22,790	24,863	26,715	28,931	31,674	34,637
Transfers to persons[a]	3,070	3,379	3,945	4,443	4,839	5,263	5,798	6,558	7,269	7,977
Transfers to business	510	619	769	744	727	763	896	1,097	1,154	1,245
Interest on public debt	2,346	2,782	3,018	3,584	4,232	4,792	4,872	5,096	5,369	5,619
Current expenditure[a]	*20,871*	*23,857*	*27,175*	*30,285*	*32,588*	*35,681*	*38,281*	*41,682*	*45,466*	*49,478*
Capital formation	1,891	2,043	2,421	2,373	2,543	2,682	2,839	3,478	3,957	4,103
Total expenditure[a]	*22,762*	*25,900*	*29,596*	*32,658*	*35,131*	*38,363*	*41,120*	*45,160*	*49,423*	*53,581*
Surplus (deficit)	(813)	(829)	(2,526)	(2,326)	(484)	(639)	425	1,039	1,849	1,767

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Manitoba***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	11,188	13,160	14,014	14,911	16,520	17,661	18,421	19,542	21,541	23,485
Population (thousands)	1,025	1,026	1,033	1,046	1,055	1,064	1,071	1,079	1,084	1,085
Revenue										
Direct taxes on persons	357	453	503	580	592	589	696	800	953	1,108
Direct taxes on corporations and government business enterprises	127	120	88	94	134	134	182	207	210	217
Indirect taxes	1,016	1,180	1,374	1,589	1,690	1,866	2,023	2,239	2,357	2,512
Other transfers from persons	34	37	37	39	46	46	49	54	58	61
Investment income	297	360	440	464	508	645	634	877	926	972
Transfers from federal government	830	837	920	980	1,128	1,185	1,117	1,296	1,589	1,653
Current revenue	*2,661*	*2,987*	*3,362*	*3,746*	*4,098*	*4,465*	*4,701*	*5,473*	*6,093*	*6,523*
Capital consumption allowances	160	186	204	217	231	244	254	262	276	291
Total revenue	*2,821*	*3,173*	*3,566*	*3,963*	*4,329*	*4,709*	*4,955*	*5,735*	*6,369*	*6,814*
Taxation	1,534	1,790	2,002	2,302	2,462	2,635	2,950	3,300	3,578	3,898
Own-source current revenue	1,831	2,150	2,442	2,766	2,970	3,280	3,584	4,177	4,504	4,870
Expenditure										
Current goods and services	1,819	2,103	2,519	2,801	2,944	3,147	3,280	3,516	3,776	4,112
Transfers to persons[a]	266	307	366	416	457	494	547	610	644	678
Transfers to business	238	165	252	265	252	287	338	305	402	385
Interest on public debt	375	426	578	693	837	915	1,100	1,327	1,370	1,423
Current expenditure[a]	*2,698*	*3,001*	*3,715*	*4,176*	*4,491*	*4,844*	*5,266*	*5,759*	*6,193*	*6,599*
Capital formation	269	271	280	281	320	388	430	400	413	444
Total expenditure[a]	*2,967*	*3,272*	*3,995*	*4,456*	*4,811*	*5,232*	*5,696*	*6,159*	*6,606*	*7,043*
Surplus (deficit)	(146)	(99)	(429)	(493)	(482)	(523)	(741)	(424)	(237)	(229)

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Saskatchewan***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	12,400	14,339	14,760	15,235	16,390	17,436	17,145	17,191	18,120	19,610
Population (thousands)	959	968	977	989	1,001	1,008	1,010	1,016	1,014	1,007
Revenue										
Direct taxes on persons^{a}	408	542	596	709	637	688	758	852	975	1,006
Direct taxes on corporations and government business enterprises	128	123	87	90	141	131	125	148	150	127
Indirect taxes	1,045	1,183	1,238	1,335	1,463	1,555	1,515	1,808	2,001	2,140
Other transfers from persons	35	41	44	48	56	56	61	64	72	74
Investment income	991	971	994	1,280	1,432	1,347	1,028	1,235	1,404	1,904
Transfers from federal government	494	554	606	576	708	796	811	992	1,086	1,188
Current revenue	*3,101*	*3,414*	*3,565*	*4,038*	*4,437*	*4,573*	*4,298*	*5,099*	*5,688*	*6,439*
Capital consumption allowances	189	220	244	259	277	286	298	308	324	345
Total revenue^{a}	*3,290*	*3,634*	*3,809*	*4,297*	*4,714*	*4,859*	*4,596*	*5,407*	*6,012*	*6,784*
Taxation	1,616	1,889	1,965	2,182	2,297	2,430	2,459	2,872	3,198	3,347
Own-source current revenue	2,607	2,860	2,959	3,462	3,729	3,777	3,487	4,107	4,602	5,251
Expenditure										
Current goods and services	1,766	2,050	2,384	2,607	2,748	2,897	3,046	3,177	3,296	3,453
Transfers to persons^{a}	386	519	641	732	762	765	771	764	774	799
Transfers to business	277	255	245	235	361	453	559	348	439	661
Interest on public debt	263	311	519	640	678	816	925	1,069	1,269	1,276
Current expenditure^{a}	*2,692*	*3,135*	*3,789*	*4,214*	*4,549*	*4,931*	*5,301*	*5,358*	*5,778*	*6,189*
Capital formation	384	420	404	402	432	468	542	513	523	646
Total expenditure^{a}	*3,076*	*3,555*	*4,193*	*4,616*	*4,981*	*5,399*	*5,843*	*5,871*	*6,301*	*6,835*
Surplus (deficit)	214	79	(384)	(319)	(267)	(540)	(1,247)	(464)	(289)	(51)

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Alberta***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	43,148	49,934	52,896	55,386	58,941	65,351	57,317	59,614	61,810	66,415
Population (thousands)	2,141	2,237	2,315	2,339	2,339	2,349	2,375	2,378	2,389	2,423
Revenue										
Direct taxes on persons[a]	1,069	1,479	1,670	1,779	1,975	1,683	1,781	2,223	2,450	2,556
Direct taxes on corporations and government business enterprises	636	678	608	677	914	958	586	862	939	888
Indirect taxes	1,771	2,060	2,267	2,630	2,685	2,834	3,004	3,363	3,699	3,822
Other transfers from persons	188	219	221	276	310	303	307	358	396	419
Investment income	5,611	6,521	7,334	8,048	8,306	8,303	5,934	5,606	5,493	5,558
Transfers from federal government	715	846	1,175	1,211	1,453	1,741	1,633	1,781	1,976	1,963
Current revenue	*9,990*	*11,803*	*13,275*	*14,621*	*15,643*	*15,822*	*13,245*	*14,193*	*14,953*	*15,206*
Capital consumption allowances	411	503	595	664	735	789	827	863	912	971
Total revenue[a]	*10,401*	*12,306*	*13,870*	*15,285*	*16,378*	*16,611*	*14,072*	*15,056*	*15,865*	*16,177*
Taxation	3,664	4,436	4,766	5,362	5,884	5,778	5,678	6,806	7,484	7,695
Own-source current revenue	9,275	10,957	12,100	13,410	14,190	14,081	11,612	12,412	12,977	13,253
Expenditure										
Current goods and services	4,284	5,359	6,170	7,271	7,272	7,563	8,167	8,554	8,935	9,535
Transfers to persons[a]	1,039	1,333	1,795	1,985	2,003	2,198	2,175	2,222	2,354	2,446
Transfers to business	450	494	1,162	2,160	2,006	2,014	2,242	1,802	1,521	1,456
Interest on public debt	463	607	1,004	1,253	1,405	1,450	1,458	1,714	1,909	2,137
Current expenditure[a]	*6,236*	*7,793*	*10,131*	*12,669*	*12,686*	*13,225*	*14,042*	*14,292*	*14,719*	*15,574*
Capital formation	1,377	2,115	2,751	2,124	1,753	1,972	1,981	1,787	1,695	1,811
Total expenditure[a]	*7,613*	*9,908*	*12,882*	*14,793*	*14,439*	*15,197*	*16,023*	*16,079*	*16,414*	*17,385*
Surplus (deficit)	2,788	2,398	988	492	1,939	1,414	(1,951)	(1,023)	(549)	(1,208)

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: British Columbia***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
						(millions of dollars)				
GDP at market prices	38,239	44,691	46,115	48,151	51,119	54,499	57,342	62,666	69,291	76,332
Population (thousands)	2,666	2,744	2,788	2,814	2,848	2,870	2,889	2,925	2,980	3,053
Revenue										
Direct taxes on persons	1,629	2,002	2,243	2,477	2,381	2,453	2,610	2,987	3,423	3,480
Direct taxes on corporations and government business enterprises	561	478	301	284	397	382	472	621	578	538
Indirect taxes	2,948	3,970	4,310	4,524	4,846	4,992	5,148	5,266	5,804	6,430
Other transfers from persons	241	307	386	417	427	448	465	534	671	772
Investment income	1,332	1,227	1,273	1,285	1,546	1,624	1,795	2,011	2,313	2,702
Transfers from federal government	1,043	1,106	1,239	1,474	1,725	1,956	1,980	2,096	2,214	2,241
Current revenue	*7,754*	*9,090*	*9,752*	*10,461*	*11,322*	*11,855*	*12,470*	*13,515*	*15,003*	*16,163*
Capital consumption allowances	414	488	540	576	610	620	641	660	694	736
Total revenue	*8,168*	*9,578*	*10,292*	*11,037*	*11,932*	*12,475*	*13,111*	*14,175*	*15,697*	*16,899*
Taxation	5,379	6,757	7,240	7,702	8,051	8,275	8,695	9,408	10,476	11,220
Own-source current revenue	6,711	7,984	8,513	8,987	9,597	9,899	10,490	11,419	12,789	13,922
Expenditure										
Current goods and services	5,249	6,288	7,304	7,674	7,682	7,611	8,021	8,473	8,939	9,564
Transfers to persons	1,176	1,348	1,580	1,799	1,861	2,004	2,101	2,261	2,422	2,627
Transfers to business	522	616	505	545	564	551	877	737	690	710
Interest on public debt	445	535	686	897	1,199	1,402	1,514	1,624	1,758	1,972
Current expenditure	*7,392*	*8,787*	*10,075*	*10,915*	*11,306*	*11,568*	*12,513*	*13,095*	*13,809*	*14,873*
Capital formation	886	1,027	979	1,041	895	1,383	1,263	1,228	1,136	1,634
Total expenditure	*8,278*	*9,814*	*11,054*	*11,956*	*12,201*	*12,951*	*13,776*	*14,323*	*14,945*	*16,507*
Surplus (deficit)	(110)	(236)	(762)	(919)	(269)	(476)	(665)	(148)	752	392

Table A.1: ***PLH-Sector Revenue and Expenditure, 1980-89: Yukon and Northwest Territories***

(Provincial Economic Accounts basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(millions of dollars)					
GDP at market prices	1,239	1,229	1,476	1,588	1,874	2,225	2,306	2,542	2,712	2,873
Population (thousands)	67	69	71	72	73	76	76	77	77	78
Revenue										
Direct taxes on persons	43	53	56	74	73	69	75	76	88	88
Direct taxes on corporations and government business enterprises	13	8	6	8	15	15	8	16	16	16
Indirect taxes	41	47	54	62	62	67	72	74	78	84
Other transfers from persons	3	4	4	4	5	5	7	5	4	4
Investment income	16	23	27	24	30	37	39	33	36	43
Transfers from federal government	367	413	388	499	562	685	689	771	910	1,031
Current revenue	*483*	*548*	*535*	*671*	*747*	*878*	*890*	*975*	*1,132*	*1,266*
Capital consumption allowances	34	44	51	57	66	77	87	98	107	120
Total revenue	*517*	*592*	*586*	*728*	*813*	*955*	*977*	*1,073*	*1,239*	*1,386*
Taxation	100	112	120	148	155	156	162	171	186	192
Own-source current revenue	116	135	147	172	185	193	201	204	222	235
Expenditure										
Current goods and services	294	413	469	522	566	632	640	737	806	847
Transfers to persons	20	27	34	39	43	45	51	56	64	67
Transfers to business	25	44	38	48	55	65	72	87	92	98
Interest on public debt	6	6	7	8	6	6	5	5	5	5
Current expenditure	*345*	*490*	*548*	*617*	*670*	*748*	*768*	*885*	*967*	*1,017*
Capital formation	93	90	82	82	111	136	206	210	173	217
Total expenditure	*438*	*580*	*630*	*699*	*781*	*884*	*974*	*1,095*	*1,140*	*1,234*
Surplus (deficit)	79	12	(44)	29	32	71	3	(22)	99	152

Table A.2: ***PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Newfoundland***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	1.0	2.0	3.3	5.0	5.0	5.4
Direct taxes on corporations and government business enterprises	0.9	0.8	0.9	0.9	0.8	0.8
Indirect taxes	6.9	8.2	9.9	10.1	10.8	11.0
Other transfers from persons	0.3	0.4	0.3	0.3	0.3	0.3
Investment income	0.6	1.0	1.7	2.4	2.7	3.0
Transfers from federal government	12.5	16.2	17.1	16.7	16.5	16.4
Current revenue	*22.2*	*28.6*	*33.2*	*35.4*	*36.1*	*36.9*
Capital consumption allowances	1.2	1.3	1.7	1.9	2.0	1.8
Total revenue[a]	*23.4*	*29.9*	*34.9*	*37.3*	*38.2*	*38.7*
Taxation	9.0	11.4	14.4	16.3	16.9	17.5
Own-source current revenue	9.7	12.4	16.1	18.6	19.6	20.5
Expenditure						
Current goods and services	11.9	14.5	14.1	15.9	18.1	16.5
Transfers to persons[a]	6.8	9.9	11.3	11.0	11.2	10.9
Transfers to business	0.2	1.0	1.8	1.4	1.1	1.2
Interest on public debt	1.6	2.9	4.4	6.2	7.0	7.3
Current expenditure[a]	*20.6*	*28.2*	*31.7*	*34.5*	*37.4*	*35.9*
Capital formation	7.0	6.2	7.5	3.8	3.3	3.2
Total expenditure[a]	*27.6*	*34.5*	*39.2*	*38.3*	*40.7*	*39.1*
Surplus (deficit)	(4.2)	(4.5)	(4.2)	(1.0)	(2.6)	(0.4)

Table A.2: ***PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Prince Edward Island***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons	0.8	1.9	2.9	4.4	4.5	5.5
Direct taxes on corporations and government business enterprises	0.7	0.5	0.6	0.6	0.6	0.9
Indirect taxes	9.0	10.9	10.4	9.2	10.1	9.9
Other transfers from persons	0.7	0.5	0.3	0.3	0.3	0.3
Investment income	0.5	1.1	1.5	2.2	3.1	3.0
Transfers from federal government	11.4	16.7	20.5	20.4	17.9	15.5
Current revenue	*23.2*	*31.5*	*36.3*	*37.1*	*36.4*	*35.2*
Capital consumption allowances	2.2	2.1	2.3	2.4	2.4	2.0
Total revenue	*25.3*	*33.6*	*38.6*	*39.5*	*38.8*	*37.2*
Taxation	11.2	13.7	14.2	14.5	15.4	16.6
Own-source current revenue	11.7	14.7	15.7	16.7	18.5	19.6
Expenditure						
Current goods and services	14.3	19.1	25.2	24.7	23.5	20.5
Transfers to persons	2.5	4.6	4.2	5.1	4.9	5.1
Transfers to business	0.1	0.8	0.9	1.0	1.4	2.0
Interest on public debt	2.6	3.6	3.3	3.4	4.5	4.3
Current expenditure	*19.5*	*28.0*	*33.6*	*34.2*	*34.3*	*31.9*
Capital formation	8.0	5.8	5.2	5.5	3.3	4.0
Total expenditure	*27.5*	*33.8*	*38.8*	*39.8*	*37.6*	*35.9*
Surplus (deficit)	(2.2)	(0.2)	(0.2)	(0.2)	1.1	1.3

Table A.2: *PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Nova Scotia*

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	1.1	2.2	3.7	5.2	5.1	5.5
Direct taxes on corporations and government business enterprises	0.6	0.6	0.7	0.9	0.7	0.8
Indirect taxes	8.8	9.4	9.9	9.3	9.2	9.0
Other transfers from persons	0.4	0.4	0.3	0.3	0.3	0.3
Investment income	0.8	1.4	1.7	1.9	2.3	2.2
Transfers from federal government	6.5	9.9	11.1	13.1	10.8	9.8
Current revenue	*18.3*	*24.0*	*27.5*	*30.7*	*28.3*	*27.6*
Capital consumption allowances	1.5	1.5	1.7	1.9	1.7	1.4
Total revenue[a]	*19.8*	*25.6*	*29.2*	*32.6*	*30.0*	*29.0*
Taxation	11.0	12.7	14.7	15.7	15.2	15.6
Own-source current revenue	11.8	14.1	16.4	17.6	17.5	17.8
Expenditure						
Current goods and services	12.5	15.7	18.6	21.7	20.2	17.8
Transfers to persons[a]	2.0	3.1	4.0	4.4	4.1	3.7
Transfers to business	0.1	0.2	0.6	1.6	1.4	0.9
Interest on public debt	1.9	2.8	2.8	3.3	4.8	4.5
Current expenditure[a]	*16.4*	*21.9*	*26.0*	*31.0*	*32.1*	*27.0*
Capital formation	4.4	4.9	3.9	3.2	2.3	2.5
Total expenditure[a]	*20.8*	*26.7*	*29.9*	*34.1*	*34.3*	*29.5*
Surplus (deficit)	(1.0)	(1.2)	(0.8)	(1.6)	(4.3)	(0.6)

Table A.2: ***PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: New Brunswick***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	1.2	2.4	3.6	4.9	5.1	5.4
Direct taxes on corporations and government business enterprises	0.6	0.6	0.7	1.0	0.7	0.9
Indirect taxes	8.6	9.0	8.8	8.8	9.2	9.4
Other transfers from persons	0.7	0.4	0.4	0.4	0.3	0.3
Investment income	1.0	0.9	1.1	1.6	2.2	2.4
Transfers from federal government	7.5	10.8	12.2	13.4	12.6	11.5
Current revenue	*19.7*	*24.1*	*26.8*	*30.1*	*30.1*	*29.8*
Capital consumption allowances	1.8	1.8	1.9	2.2	2.2	1.8
Total revenue[a]	*21.4*	*26.0*	*28.7*	*32.3*	*32.3*	*31.6*
Taxation	11.2	12.4	13.5	15.0	15.3	15.9
Own-source current revenue	12.1	13.3	14.6	16.7	17.5	18.3
Expenditure						
Current goods and services	12.8	15.6	17.8	19.7	20.2	17.8
Transfers to persons[a]	2.2	3.9	4.4	4.9	5.4	5.1
Transfers to business	0.0	0.3	0.5	0.7	0.9	0.7
Interest on public debt	2.0	2.0	2.2	2.7	4.1	4.3
Current expenditure[a]	*17.1*	*21.8*	*24.9*	*28.0*	*30.6*	*27.9*
Capital formation	5.1	5.4	5.6	5.0	3.9	3.3
Total expenditure[a]	*22.1*	*27.2*	*30.5*	*33.1*	*34.5*	*31.2*
Surplus (deficit)	(0.7)	(1.2)	(1.8)	(0.8)	(2.3)	0.4

Table A.2: ***PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Quebec***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	1.9	4.4	6.7	8.7	9.3	9.4
Direct taxes on corporations and government business enterprises	1.1	0.9	1.0	0.8	0.3	0.4
Indirect taxes	8.3	9.5	9.0	8.3	9.1	8.9
Other transfers from persons	0.3	0.3	0.3	0.5	0.7	0.6
Investment income	0.4	0.5	0.7	1.1	1.9	2.1
Transfers from federal government	2.7	3.8	4.6	5.6	6.1	4.8
Current revenue	*14.7*	*19.4*	*22.4*	*25.1*	*27.5*	*26.1*
Capital consumption allowances	0.9	1.0	1.2	1.3	1.3	1.2
Total revenue[a]	*15.6*	*20.4*	*23.6*	*26.3*	*28.8*	*27.3*
Taxation	11.6	15.1	17.0	18.4	19.5	19.3
Own-source current revenue	12.0	15.5	17.8	19.5	21.3	21.4
Taxation minus abatement	11.0	13.6	15.0	17.1	18.2	18.1
Own-source minus abatement	11.4	14.0	15.7	18.2	20.1	20.1
Transfers plus abatement	3.2	5.4	6.7	6.9	7.4	6.0
Expenditure						
Current goods and services	9.2	12.8	15.6	18.1	18.6	16.6
Transfers to persons[a]	2.5	3.4	4.1	5.3	5.8	5.1
Transfers to business	0.3	0.3	0.4	0.8	1.3	1.1
Interest on public debt	1.2	1.7	2.1	2.9	4.2	4.1
Current expenditure[a]	*13.2*	*18.3*	*22.2*	*27.2*	*29.8*	*26.9*
Capital formation	3.6	3.4	3.3	2.5	2.1	1.9
Total expenditure[a]	*16.7*	*21.6*	*25.5*	*29.6*	*31.9*	*28.8*
Surplus (deficit)	(1.1)	(1.2)	(1.9)	(3.3)	(3.1)	(1.5)

Table A.2: *PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Ontario*

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	1.6	2.7	2.8	3.7	4.4	5.2
Direct taxes on corporations and government business enterprises	1.1	1.0	1.2	1.0	0.9	1.1
Indirect taxes	7.0	8.2	8.0	7.9	8.6	8.7
Other transfers from persons	0.9	1.5	1.2	1.2	1.2	1.0
Investment income	0.5	0.8	1.1	1.4	1.6	1.4
Transfers from federal government	1.6	2.3	2.8	2.7	2.5	2.2
Current revenue	*12.6*	*16.5*	*17.0*	*18.0*	*19.1*	*19.6*
Capital consumption allowances	0.9	0.9	1.0	1.1	1.1	0.9
Total revenue[a]	*13.5*	*17.4*	*18.0*	*19.1*	*20.2*	*20.4*
Taxation	10.6	13.4	13.2	13.9	15.1	15.9
Own-source current revenue	11.0	14.3	14.3	15.3	16.6	17.4
Expenditure						
Current goods and services	8.4	11.6	12.8	13.1	13.7	12.7
Transfers to persons[a]	1.2	2.5	2.4	2.6	2.9	2.9
Transfers to business	0.1	0.1	0.3	0.4	0.5	0.5
Interest on public debt	1.0	1.2	1.7	2.0	2.4	2.2
Current expenditure[a]	*10.7*	*15.4*	*17.2*	*18.1*	*19.4*	*18.3*
Capital formation	3.2	2.8	2.3	1.7	1.5	1.5
Total expenditure[a]	*13.9*	*18.3*	*19.5*	*19.8*	*20.9*	*19.8*
Surplus (deficit)	(0.4)	(0.8)	(1.5)	(0.8)	(0.8)	0.6

Table A.2: ***PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Manitoba***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons	1.5	2.9	3.4	3.7	3.9	4.4
Direct taxes on corporations and government business enterprises	0.8	0.8	1.1	1.0	0.8	1.0
Indirect taxes	7.3	8.9	9.1	9.2	10.4	11.0
Other transfers from persons	0.8	1.1	0.4	0.3	0.3	0.3
Investment income	1.1	1.4	1.9	2.5	3.3	4.3
Transfers from federal government	3.3	4.8	6.0	6.9	6.5	7.0
Current revenue	*14.7*	*19.7*	*21.6*	*23.3*	*24.9*	*28.0*
Capital consumption allowances	1.2	1.3	1.3	1.4	1.4	1.3
Total revenue	*15.9*	*20.9*	*22.9*	*24.6*	*26.4*	*29.3*
Taxation	10.3	13.4	13.7	13.8	15.1	16.7
Own-source current revenue	11.4	14.8	15.6	16.3	18.4	21.0
Expenditure						
Current goods and services	10.2	12.6	15.8	16.3	18.0	17.7
Transfers to persons[a]	1.6	2.6	2.7	2.4	2.8	3.0
Transfers to business	0.5	0.4	0.9	1.5	1.7	1.7
Interest on public debt	1.3	1.5	1.9	3.0	5.0	6.4
Current expenditure[a]	*13.5*	*17.1*	*21.2*	*23.2*	*27.5*	*28.8*
Capital formation	4.1	3.5	2.6	2.4	2.1	2.0
Total expenditure[a]	*17.6*	*20.6*	*23.9*	*25.5*	*29.6*	*30.7*
Surplus (deficit)	(1.7)	0.3	(0.9)	(0.9)	(3.3)	(1.4)

Table A.2: *PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Saskatchewan*

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	1.1	2.1	2.7	3.9	4.2	5.2
Direct taxes on corporations and government business enterprises	0.5	0.5	0.8	1.0	0.7	0.8
Indirect taxes	9.3	11.0	8.7	8.5	8.8	10.8
Other transfers from persons	1.0	1.0	0.5	0.3	0.3	0.4
Investment income	2.3	2.8	4.4	7.1	7.5	8.2
Transfers from federal government	3.1	4.8	5.8	4.2	4.3	5.9
Current revenue	*17.4*	*22.2*	*22.9*	*24.9*	*25.8*	*31.3*
Capital consumption allowances	1.4	1.7	1.6	1.6	1.7	1.8
Total revenue[a]	*18.7*	*23.9*	*24.5*	*26.5*	*27.5*	*33.1*
Taxation	11.9	14.7	12.7	13.7	14.0	17.1
Own-source current revenue	14.2	17.4	17.1	20.8	21.5	25.4
Expenditure						
Current goods and services	11.5	14.6	14.1	14.5	16.9	18.1
Transfers to persons[a]	1.7	2.6	3.0	3.3	4.5	4.3
Transfers to business	0.1	0.5	1.4	1.9	2.3	2.6
Interest on public debt	1.6	1.9	1.4	2.2	4.4	6.6
Current expenditure[a]	*14.9*	*19.5*	*19.9*	*21.9*	*28.1*	*31.5*
Capital formation	3.7	4.0	3.3	3.3	2.8	3.1
Total expenditure[a]	*18.6*	*23.5*	*23.2*	*25.2*	*30.8*	*34.6*
Surplus (deficit)	0.2	0.4	1.3	1.3	(3.3)	(1.5)

Table A.2: ***PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Alberta***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	1.1	2.2	2.3	2.7	3.1	3.8
Direct taxes on corporations and government business enterprises	0.7	0.8	1.5	1.5	1.3	1.4
Indirect taxes	6.3	6.3	5.2	4.5	4.6	5.8
Other transfers from persons	0.3	0.7	0.6	0.5	0.5	0.6
Investment income	3.8	4.5	7.4	12.4	13.1	8.9
Transfers from federal government	2.2	3.0	3.1	2.0	2.5	3.0
Current revenue	*14.4*	*17.5*	*20.0*	*23.7*	*25.1*	*23.6*
Capital consumption allowances	1.5	1.5	1.2	1.0	1.2	1.5
Total revenue[a]	*16.0*	*19.0*	*21.2*	*24.7*	*26.3*	*25.1*
Taxation	8.4	10.1	9.5	9.2	9.5	11.7
Own-source current revenue	12.2	14.5	16.9	21.6	22.6	20.6
Expenditure						
Current goods and services	10.2	12.9	11.5	10.5	12.6	14.4
Transfers to persons[a]	2.1	3.2	2.5	2.5	3.5	3.7
Transfers to business	0.1	0.4	0.9	1.1	3.3	2.6
Interest on public debt	0.8	1.5	1.4	1.2	2.3	3.1
Current expenditure[a]	*13.3*	*18.1*	*16.3*	*15.2*	*21.7*	*23.7*
Capital formation	4.5	4.0	2.8	3.2	3.7	2.8
Total expenditure[a]	*17.7*	*22.1*	*19.1*	*18.5*	*25.4*	*26.6*
Surplus (deficit)	(1.8)	(3.1)	2.2	6.2	1.0	(1.5)

Table A.2: *PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: British Columbia*

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons	1.6	2.9	3.3	4.5	4.7	4.8
Direct taxes on corporations and government business enterprises	1.0	1.1	1.4	1.4	0.7	0.8
Indirect taxes	8.9	9.1	8.8	8.5	9.3	8.4
Other transfers from persons	0.3	0.8	0.8	0.7	0.8	0.9
Investment income	1.1	1.4	2.3	2.9	2.9	3.4
Transfers from federal government	1.8	2.4	2.7	2.9	3.2	3.2
Current revenue	*14.8*	*17.8*	*19.2*	*20.8*	*21.7*	*21.4*
Capital consumption allowances	1.2	1.1	1.1	1.1	1.2	1.0
Total revenue	*16.0*	*18.9*	*20.3*	*21.9*	*22.9*	*22.4*
Taxation	11.9	14.0	14.2	15.1	15.6	14.9
Own-source current revenue	13.0	15.4	16.5	18.0	18.5	18.3
Expenditure						
Current goods and services	9.0	11.0	12.6	13.5	15.0	13.0
Transfers to persons	1.9	2.6	3.0	3.0	3.6	3.5
Transfers to business	0.5	0.7	0.9	1.2	1.2	1.0
Interest on public debt	0.6	0.7	0.9	1.1	2.2	2.6
Current expenditure	*12.0*	*15.0*	*17.3*	*18.8*	*21.9*	*20.1*
Capital formation	3.5	3.0	3.0	2.5	2.2	1.9
Total expenditure	*15.5*	*18.0*	*20.3*	*21.3*	*24.1*	*22.0*
Surplus (deficit)	0.5	0.9	0.0	0.7	(1.2)	0.5

Table A.2: ***PLH-Sector Revenue and Expenditure as Proportions of GDP, 1962-89: Yukon and Northwest Territories***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons	0.0	0.0	0.2	2.9	3.7	3.1
Direct taxes on corporations and government business enterprises	0.0	0.0	0.0	0.6	0.5	0.6
Indirect taxes	3.7	4.2	4.5	3.5	3.4	2.9
Other transfers from persons	0.0	0.0	0.2	0.3	0.3	0.2
Investment income	0.0	0.3	0.6	1.2	1.7	1.4
Transfers from federal government	5.5	13.6	25.3	30.8	29.7	33.3
Current revenue	*9.3*	*18.2*	*30.8*	*39.3*	*39.3*	*41.4*
Capital consumption allowances	0.9	0.6	1.3	2.6	3.6	4.0
Total revenue	*10.1*	*18.8*	*32.1*	*41.9*	*42.8*	*45.4*
Taxation	3.7	4.2	4.9	7.3	8.0	6.8
Own-source current revenue	3.7	4.5	5.5	8.5	9.6	8.1
Expenditure						
Current goods and services	7.5	19.2	26.7	29.6	30.2	29.4
Transfers to persons	0.3	1.6	1.8	1.9	2.3	2.3
Transfers to business	0.0	0.0	0.8	2.7	2.9	3.4
Interest on public debt	0.0	0.8	0.9	0.5	0.4	0.2
Current expenditure	*7.7*	*21.6*	*30.2*	*34.7*	*35.7*	*35.3*
Capital formation	2.4	3.7	7.1	8.1	6.3	7.4
Total expenditure	*10.1*	*25.3*	*37.3*	*42.8*	*42.1*	*42.7*
Surplus (deficit)	0.0	(6.5)	(5.1)	(0.9)	0.8	2.7

Table A.3: ***PLH-Sector Revenue and Expenditure as Proportions of Totals, 1962-89: Newfoundland***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	4.4	7.1	10.0	14.0	13.9	14.7
Direct taxes on corporations and government business enterprises	4.1	3.0	2.6	2.4	2.1	2.1
Indirect taxes	31.0	28.6	29.9	28.7	29.8	30.0
Other transfers from persons	1.4	1.2	0.8	0.9	0.9	0.8
Investment income	2.9	3.6	5.1	6.7	7.6	8.1
Transfers from federal government	56.3	56.5	51.5	47.3	45.7	44.4
Taxation	40.9	39.9	43.4	46.0	46.7	47.5
Own-source current revenue	43.7	43.5	48.5	52.7	54.3	55.6
Expenditure						
Current goods and services	43.3	41.9	36.1	41.6	44.4	42.1
Transfers to persons[a]	24.8	28.7	28.9	28.7	27.4	28.0
Transfers to business	0.6	2.9	4.6	3.7	2.8	3.1
Interest on public debt	5.9	8.6	11.4	16.2	17.3	18.7
Current expenditure[a]	*74.6*	*82.1*	*80.9*	*90.2*	*91.9*	*91.9*
Capital formation	25.4	17.9	19.1	9.8	8.1	8.1

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Prince Edward Island***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons	3.4	6.0	7.9	11.8	12.3	15.7
Direct taxes on corporations and government business enterprises	3.0	1.5	1.7	1.5	1.6	2.7
Indirect taxes	39.0	34.7	28.9	24.9	27.7	28.2
Other transfers from persons	3.0	1.5	0.9	0.8	0.8	0.8
Investment income	2.3	3.2	4.1	6.0	8.5	8.4
Transfers from federal government	49.3	53.1	56.4	54.9	49.2	44.2
Taxation	48.4	43.7	39.4	39.1	42.4	47.3
Own-source current revenue	50.7	46.9	43.6	45.1	50.8	55.8
Expenditure						
Current goods and services	51.6	56.3	64.8	62.0	62.3	57.1
Transfers to persons	9.1	13.7	10.9	12.9	13.1	14.1
Transfers to business	0.4	2.4	2.4	2.6	3.7	5.6
Interest on public debt	9.5	10.6	8.5	8.6	12.1	12.1
Current expenditure	*70.6*	*83.0*	*86.6*	*86.1*	*91.2*	*88.9*
Capital formation	29.4	17.0	13.4	13.9	8.8	11.1

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Nova Scotia***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	6.2	9.1	13.6	16.9	17.9	19.9
Direct taxes on corporations and government business enterprises	3.1	2.5	2.4	2.8	2.4	2.9
Indirect taxes	48.4	39.3	36.3	30.4	32.4	32.7
Other transfers from persons	2.4	1.7	1.1	1.1	1.0	1.0
Investment income	4.4	5.9	6.1	6.2	8.3	8.0
Transfers from federal government	35.5	41.4	40.4	42.6	38.0	35.5
Taxation	60.1	52.7	53.4	51.2	53.7	56.5
Own-source current revenue	64.5	58.6	59.6	57.4	62.0	64.5
Expenditure						
Current goods and services	60.1	58.6	62.0	63.6	59.0	60.3
Transfers to persons[a]	9.6	11.7	13.4	12.8	11.8	12.7
Transfers to business	0.3	0.8	2.1	4.7	4.0	3.1
Interest on public debt	9.1	10.4	9.6	9.6	14.1	15.3
Current expenditure[a]	*79.0*	*81.5*	*87.1*	*90.7*	*93.4*	*91.4*
Capital formation	21.0	18.5	12.9	9.3	6.6	8.6

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: New Brunswick***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	6.1	9.9	13.3	16.3	16.8	18.0
Direct taxes on corporations and government business enterprises	3.3	2.5	2.7	3.2	2.5	3.0
Indirect taxes	43.9	37.5	33.0	29.3	30.5	31.7
Other transfers from persons	3.6	1.7	1.4	1.2	1.0	0.9
Investment income	5.0	3.7	4.1	5.4	7.4	7.9
Transfers from federal government	38.2	44.7	45.6	44.6	41.8	38.6
Taxation	56.8	51.5	50.3	50.0	50.8	53.6
Own-source current revenue	61.8	56.3	54.4	55.4	58.2	61.4
Expenditure						
Current goods and services	57.9	57.3	58.4	59.6	58.5	57.1
Transfers to persons[a]	10.1	14.2	14.3	14.8	15.6	16.4
Transfers to business	0.2	1.3	1.8	2.2	2.5	2.3
Interest on public debt	8.9	7.2	7.1	8.2	12.0	13.7
Current expenditure[a]	*77.1*	*79.9*	*81.6*	*84.8*	*88.7*	*89.5*
Capital formation	22.9	20.1	18.4	15.2	11.3	10.5

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Quebec***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	12.9	22.3	30.1	34.5	34.0	36.1
Direct taxes on corporations and government business enterprises	7.4	4.9	4.4	3.4	1.2	1.6
Indirect taxes	56.7	49.2	40.4	33.3	33.2	34.1
Other transfers from persons	1.9	1.6	1.2	2.1	2.5	2.4
Investment income	2.8	2.3	3.2	4.3	6.8	7.7
Transfers from federal government	18.3	19.6	20.7	22.3	22.3	18.2
Taxation	78.9	78.0	76.0	73.4	70.9	74.2
Own-source current revenue	81.7	80.4	79.3	77.7	77.7	81.8
Taxation minus abatement	75.2	70.1	66.8	68.1	66.3	69.5
Own-source minus abatement	78.0	72.5	70.1	72.4	73.1	77.1
Transfers plus abatement	22.0	27.5	29.9	27.6	26.9	22.9
Expenditure						
Current goods and services	54.5	58.9	60.7	61.1	58.1	57.7
Transfers to persons[a]	15.1	15.8	16.1	18.0	18.2	17.9
Transfers to business	1.8	1.3	1.6	2.7	4.0	3.8
Interest on public debt	6.9	8.0	8.2	9.7	13.2	14.2
Current expenditure[a]	*78.6*	*84.4*	*87.1*	*91.6*	*93.4*	*93.6*
Capital formation	21.3	15.5	12.8	8.3	6.6	6.4

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Ontario***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	12.6	16.4	16.3	20.8	23.1	26.5
Direct taxes on corporations and government business enterprises	8.5	6.3	6.9	5.5	4.7	5.5
Indirect taxes	56.7	50.0	46.9	44.0	44.8	44.5
Other transfers from persons	6.9	8.8	7.3	6.9	6.2	4.9
Investment income	3.6	4.9	6.5	7.8	8.3	7.4
Transfers from federal government	12.6	13.6	16.2	15.1	13.0	11.2
Taxation	83.8	81.5	77.3	77.1	78.8	81.4
Own-source current revenue	87.4	86.4	83.8	84.9	87.0	88.8
Expenditure						
Current goods and services	60.6	63.3	65.5	66.2	65.2	64.1
Transfers to persons[a]	8.7	13.6	12.5	12.9	13.7	14.6
Transfers to business	0.6	0.7	1.7	2.1	2.2	2.4
Interest on public debt	6.9	6.7	8.5	10.1	11.5	11.1
Current expenditure[a]	*76.8*	*84.3*	*88.2*	*91.3*	*92.7*	*92.1*
Capital formation	23.2	15.7	11.8	8.7	7.3	7.9

Table A.3: *PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Manitoba*

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons	9.1	13.1	14.1	14.3	14.6	15.7
Direct taxes on corporations and government business enterprises	5.4	4.3	5.1	4.4	3.1	3.5
Indirect taxes	49.7	45.7	42.1	39.4	41.9	39.4
Other transfers from persons	5.7	5.4	1.9	1.2	1.1	1.0
Investment income	7.5	7.0	8.9	10.9	13.2	15.4
Transfers from federal government	22.6	24.5	27.9	29.8	26.3	25.0
Taxation	69.9	68.5	63.2	59.3	60.6	59.6
Own-source current revenue	77.4	75.5	72.1	70.2	73.7	75.0
Expenditure						
Current goods and services	58.1	61.1	66.0	63.7	61.0	57.5
Transfers to persons[a]	8.9	12.6	11.3	9.6	9.4	9.8
Transfers to business	2.5	2.1	3.6	5.7	5.8	5.5
Interest on public debt	7.3	7.2	7.9	11.8	16.8	20.8
Current expenditure[a]	*76.8*	*83.0*	*88.8*	*90.8*	*93.0*	*93.6*
Capital formation	23.2	17.0	11.2	9.2	7.0	6.4

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Saskatchewan***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	6.4	9.7	12.0	15.7	16.3	16.5
Direct taxes on corporations and government business enterprises	3.0	2.5	3.6	3.8	2.7	2.5
Indirect taxes	53.8	49.7	37.9	34.0	34.0	34.6
Other transfers from persons	5.6	4.3	2.0	1.4	1.3	1.2
Investment income	13.2	12.4	19.5	28.4	29.0	26.2
Transfers from federal government	18.1	21.4	25.0	16.7	16.7	19.0
Taxation	68.8	66.2	56.5	54.9	54.3	54.8
Own-source current revenue	81.9	78.6	75.0	83.3	83.3	81.0
Expenditure						
Current goods and services	62.0	62.0	60.9	57.6	54.9	52.3
Transfers to persons[a]	9.0	11.0	13.1	13.0	14.8	12.3
Transfers to business	0.6	1.9	6.0	7.6	7.2	7.5
Interest on public debt	8.5	7.9	5.9	8.7	14.2	19.0
Current expenditure[a]	*80.1*	*82.8*	*85.9*	*86.9*	*91.0*	*91.2*
Capital formation	19.9	17.2	14.1	13.1	9.0	8.8

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Alberta***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average percentage)			
Revenue						
Direct taxes on persons[a]	7.7	12.5	11.5	11.6	12.3	16.3
Direct taxes on corporations and government business enterprises	4.7	4.8	7.2	6.3	5.1	6.1
Indirect taxes	43.7	36.3	26.0	19.1	18.6	24.5
Other transfers from persons	2.0	3.9	3.2	2.0	2.0	2.6
Investment income	26.6	25.6	36.5	52.4	52.1	37.6
Transfers from federal government	15.3	16.9	15.5	8.6	10.0	12.9
Taxation	58.1	57.5	47.9	39.0	37.9	49.5
Own-source current revenue	84.7	83.1	84.5	91.4	90.0	87.1
Expenditure						
Current goods and services	57.7	58.4	60.4	56.7	49.6	54.2
Transfers to persons[a]	11.8	14.6	12.8	13.5	13.9	14.1
Transfers to business	0.7	1.9	4.7	5.8	13.0	9.6
Interest on public debt	4.7	6.9	7.3	6.7	8.9	11.5
Current expenditure[a]	*74.9*	*81.9*	*85.2*	*82.6*	*85.4*	*89.4*
Capital formation	25.1	18.1	14.8	17.4	14.6	10.6

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: British Columbia***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average	*percentage)*		
Revenue						
Direct taxes on persons	10.7	16.6	17.3	21.6	21.9	22.1
Direct taxes on corporations and government business enterprises	6.8	6.1	7.3	6.8	3.3	3.9
Indirect taxes	60.4	51.7	45.6	40.6	42.7	39.1
Other transfers from persons	2.2	4.6	4.0	3.2	3.8	4.4
Investment income	7.5	7.9	11.8	14.1	13.4	15.7
Transfers from federal government	12.5	13.2	14.0	13.7	14.9	14.7
Taxation	80.0	78.9	74.1	72.2	71.7	69.6
Own-source current revenue	87.5	86.8	86.0	86.3	85.1	85.3
Expenditure						
Current goods and services	58.0	60.9	61.8	63.3	62.0	59.0
Transfers to persons	12.2	14.4	14.6	14.1	15.1	16.0
Transfers to business	3.3	4.1	4.3	5.6	4.9	4.7
Interest on public debt	3.7	3.9	4.3	5.4	9.1	11.7
Current expenditure	*77.2*	*83.3*	*85.0*	*88.5*	*91.1*	*91.3*
Capital formation	22.8	16.7	15.0	11.5	8.9	8.7

Table A.3: ***PLH-Sector Revenue and Expenditure, as Proportions of Totals, 1962-89: Yukon and Northwest Territories***

(Provincial Economic Accounts basis)

	1962–66	1967–71	1972–76	1977–81	1982–86	1987–89
			(average	*percentage)*		
Revenue						
Direct taxes on persons	0.0	0.0	0.5	7.3	9.5	7.5
Direct taxes on corporations and government business enterprises	0.0	0.0	0.0	1.6	1.4	1.4
Indirect taxes	40.7	24.8	15.2	9.0	8.7	7.0
Other transfers from persons	0.0	0.0	0.8	0.7	0.7	0.4
Investment income	0.0	2.0	1.8	3.0	4.2	3.3
Transfers from federal government	59.3	73.2	81.5	78.4	75.5	80.3
Taxation	40.7	24.8	16.6	18.6	20.2	16.4
Own-source current revenue	40.7	26.8	18.5	21.6	24.5	19.7
Expenditure						
Current goods and services	72.9	75.6	71.5	69.1	71.8	68.9
Transfers to persons	2.5	7.2	5.0	4.4	5.4	5.4
Transfers to business	0.0	0.0	1.9	6.2	6.9	8.0
Interest on public debt	0.0	2.8	2.7	1.3	0.8	0.4
Current expenditure	*75.4*	*85.5*	*81.0*	*81.0*	*84.9*	*82.7*
Capital formation	24.6	14.5	19.0	19.0	15.1	17.3

Table A.4: ***PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Newfoundland***

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	1,118	2,502	4,744	8,179	14,722
Revenue					
Direct taxes on persons[a]	4	63	188	395	793
Direct taxes on corporations and government business enterprises	0	21	34	81	107
Indirect taxes	70	220	493	846	1,641
Other transfers from persons	4	8	11	25	42
Investment income	7	36	100	203	427
Transfers from federal government	127	471	740	1,325	2,392
Current revenue	212	820	1,566	2,873	5,403
Capital consumption allowances	11	34	86	169	261
Total revenue[a]	223	854	1,652	3,042	5,664
Taxation	79	312	726	1,346	2,583
Own-source current revenue	85	349	826	1,548	3,011
Expenditure					
Current goods and services	120	347	740	1,393	2,406
Transfers to persons[a]	74	274	532	898	1,608
Transfers to business	0	59	59	116	170
Interest on public debt	11	84	244	564	1,042
Current expenditure[a]	205	764	1,575	2,972	5,226
Capital formation	48	197	294	201	506
Total expenditure[a]	253	962	1,869	3,172	5,732
Surplus (deficit)[a]	(31)	(107)	(217)	(130)	(68)

Table A.4: *PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Prince Edward Island*

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	1,096	2,315	4,839	8,237	14,592
Revenue					
Direct taxes on persons	0	54	161	318	800
Direct taxes on corporations and government business enterprises	0	9	25	49	123
Indirect taxes	96	279	441	767	1,454
Other transfers from persons	10	9	17	16	38
Investment income	0	45	76	253	431
Transfers from federal government	114	477	1,093	1,453	2,331
Current revenue	219	874	1,814	2,857	5,177
Capital consumption allowances	19	54	110	212	292
Total revenue	238	928	1,924	3,069	5,469
Taxation	105	351	644	1,151	2,415
Own-source current revenue	105	396	720	1,404	2,846
Expenditure					
Current goods and services	162	514	1,314	2,000	2,992
Transfers to persons	29	117	186	408	708
Transfers to business	0	27	34	57	292
Interest on public debt	29	81	136	351	638
Current expenditure	*219*	*739*	*1,669*	*2,816*	*4,631*
Capital formation	95	153	161	310	538
Total expenditure	*314*	*892*	*1,831*	*3,127*	*5,169*
Surplus (deficit)	(76)	36	93	(57)	300

Table A.4: ***PLH-Sector Revenue and Expenditure Per Capita, 1961–89: Nova Scotia***

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	1,453	3,024	5,454	8,668	18,080
Revenue					
Direct taxes on persons[a]	5	79	214	441	965
Direct taxes on corporations and government business enterprises	0	19	33	73	131
Indirect taxes	122	312	528	781	1,651
Other transfers from persons	7	10	18	26	52
Investment income	8	46	92	218	384
Transfers from federal government	95	294	633	1,108	1,802
Current revenue	237	759	1,517	2,648	4,985
Capital consumption allowances	19	48	95	175	246
Total revenue[a]	256	807	1,613	2,823	5,231
Taxation	134	420	793	1,322	2,799
Own-source current revenue	142	465	884	1,540	3,183
Expenditure					
Current goods and services	170	545	1,110	2,000	3,244
Transfers to persons[a]	23	109	216	380	682
Transfers to business	1	14	39	157	177
Interest on public debt	23	98	142	352	783
Current expenditure[a]	*217*	*766*	*1,507*	*2,889*	4,886
Capital formation	53	124	189	310	498
Total expenditure[a]	*270*	*890*	*1,696*	*3,199*	5,384
Surplus (deficit)[a]	(14)	(82)	(83)	(376)	(152)

Table A.4: *PLH-Sector Revenue and Expenditure Per Capita, 1961-89: New Brunswick*

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	1,339	2,871	5,492	8,548	17,587
Revenue					
Direct taxes on persons[a]	5	87	216	455	932
Direct taxes on corporations and government business enterprises	0	17	36	83	146
Indirect taxes	115	265	457	729	1,640
Other transfers from persons	10	13	20	32	45
Investment income	15	27	53	168	417
Transfers from federal government	100	364	687	1,124	2,021
Current revenue	246	772	1,472	2,592	5,200
Capital consumption allowances	22	54	110	208	316
Total revenue[a]	*268*	825	1,582	2,800	5,516
Taxation	130	381	732	1,300	2,762
Own-source current revenue	145	408	785	1,468	3,179
Expenditure					
Current goods and services	176	539	1,044	1,765	3,152
Transfers to persons[a]	27	121	253	441	872
Transfers to business	0	17	41	59	135
Interest on public debt	25	55	123	223	736
Current expenditure[a]	*227*	*732*	*1,460*	*2,487*	*4,894*
Capital formation	60	137	332	350	522
Total expenditure[a]	*288*	*869*	*1,792*	*2,837*	*5,416*
Surplus (deficit)[a]	(20)	(44)	(211)	(37)	100

Table A.4: ***PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Quebec***

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	2,017	4,026	7,660	12,861	22,684
Revenue					
Direct taxes on persons[a]	26	218	555	1,157	2,032
Direct taxes on corporations and government business enterprises	23	34	66	98	87
Indirect taxes	152	383	674	1,017	1,981
Other transfers from persons	5	14	23	80	130
Investment income	9	26	58	186	494
Transfers from federal government	40	214	356	688	1,050
Current revenue	*254*	*889*	*1,732*	*3,227*	*5,774*
Capital consumption allowances	17	44	92	170	258
Total revenue[a]	*272*	*933*	*1,824*	*3,396*	*6,032*
Taxation	205	648	1,318	2,353	4,230
Own-source current revenue	214	675	1,376	2,539	4,724
Taxation minus abatement	204	578	1,153	2,183	3,945
Own-source minus abatement	213	604	1,210	2,369	4,439
Transfers plus abatement	41	285	521	858	1,335
Expenditure					
Current goods and services	156	584	1,292	2,320	3,688
Transfers to persons[a]	51	159	376	700	1,115
Transfers to business	5	14	41	117	240
Interest on public debt	19	88	174	473	904
Current expenditure[a]	*230*	*846*	*1,884*	*3,610*	*5,947*
Capital formation	58	160	218	262	457
Total expenditure[a]	*288*	*1,006*	*2,102*	*3,872*	*6,403*
Surplus (deficit)[a]	(16)	(73)	(278)	(476)	(371)

Table A.4: ***PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Ontario***

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	2,355	5,267	9,461	13,361	28,537
Revenue					
Direct taxes on persons[a]	16	163	254	604	1,479
Direct taxes on corporations and government business enterprises	29	53	92	146	294
Indirect taxes	169	438	749	1,187	2,521
Other transfers from persons	22	95	116	172	257
Investment income	12	56	117	254	398
Transfers from federal government	51	147	297	377	591
Current revenue	299	950	1,625	2,740	5,539
Capital consumption allowances	23	50	96	167	239
Total revenue[a]	322	1,001	1,721	2,907	5,778
Taxation	236	749	1,211	2,109	4,551
Own-source current revenue	247	804	1,328	2,363	4,948
Expenditure					
Current goods and services	213	684	1,245	1,980	3,616
Transfers to persons[a]	27	160	243	392	833
Transfers to business	2	13	43	72	130
Interest on public debt	26	77	168	323	587
Current expenditure[a]	*269*	*934*	*1,698*	*2,766*	*5,165*
Capital formation	81	139	184	237	428
Total expenditure[a]	*350*	*1,073*	*1,882*	*3,003*	*5,594*
Surplus (deficit)[a]	(28)	(72)	(161)	(96)	184

Table A.4: *PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Manitoba*

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	2,003	3,985	7,692	12,824	21,645
Revenue					
Direct taxes on persons	4	137	245	441	1,021
Direct taxes on corporations and government business enterprises	0	35	88	117	200
Indirect taxes	141	358	723	1,150	2,315
Other transfers from persons	26	40	18	36	56
Investment income	23	67	150	351	896
Transfers from federal government	80	248	484	816	1,524
Current revenue	274	886	1,707	2,911	6,012
Capital consumption allowances	24	52	100	161	268
Total revenue	298	937	1,807	3,092	6,280
Taxation	171	571	1,073	1,744	3,563
Own-source current revenue	194	638	1,223	2,095	4,488
Expenditure					
Current goods and services	204	595	1,317	2,049	3,790
Transfers to persons[a]	31	115	205	299	626
Transfers to business	3	19	60	161	355
Interest on public debt	25	66	175	415	1,312
Current expenditure[a]	264	796	1,757	2,924	6,082
Capital formation	91	131	188	264	409
Total expenditure[a]	355	926	1,945	3,188	6,491
Surplus (deficit)[a]	(56)	11	(138)	(96)	(211)

Table A.4: ***PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Saskatchewan***

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	1,735	3,725	8,533	14,808	19,474
Revenue					
Direct taxes on persons[a]	4	68	312	560	999
Direct taxes on corporations and government business enterprises	0	19	77	127	126
Indirect taxes	182	403	683	1,222	2,125
Other transfers from persons	21	32	24	42	73
Investment income	42	105	463	1,003	1,891
Transfers from federal government	79	259	316	572	1,180
Current revenue	328	887	1,874	3,526	6,394
Capital consumption allowances	29	65	126	227	343
Total revenue[a]	357	951	2,000	3,753	6,737
Taxation	206	523	1,096	1,951	3,324
Own-source current revenue	249	627	1,558	2,954	5,214
Expenditure					
Current goods and services	239	541	1,214	2,117	3,429
Transfers to persons[a]	29	117	258	536	793
Transfers to business	1	22	127	263	656
Interest on public debt	30	65	114	321	1,267
Current expenditure[a]	299	744	1,713	3,238	6,146
Capital formation	75	138	288	434	642
Total expenditure[a]	374	882	2,001	3,671	6,787
Surplus (deficit)[a]	(17)	69	(1)	82	(51)

Table A.4: ***PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Alberta***

(Provincial Economic Accounts basis)

	1961	1971	1978	1981	1989
			(dollars)		
GDP at market prices	2,420	4,783	11,800	22,318	27,410
Revenue					
Direct taxes on persons[a]	8	130	230	861	1,056
Direct taxes on corporations and government business enterprises	0	45	186	303	371
Indirect taxes	161	313	527	821	1,577
Other transfers from persons	8	48	60	98	173
Investment income	77	233	1,182	2,915	2,294
Transfers from federal government	77	171	320	378	806
Current revenue	330	943	2,505	5,276	6,276
Capital consumption allowances	37	73	128	225	401
Total revenue[a]	366	1,017	2,633	5,500	6,676
Taxation	176	538	1,003	1,983	3,176
Own-source current revenue	253	773	2,185	4,897	5,470
Expenditure					
Current goods and services	251	658	1,256	2,395	3,936
Transfers to persons[a]	41	178	275	596	1,009
Transfers to business	3	28	131	221	601
Interest on public debt	16	84	133	271	882
Current expenditure[a]	311	948	1,793	3,483	6,428
Capital formation	114	153	309	945	747
Total expenditure[a]	425	1,101	2,102	4,429	7,175
Surplus (deficit)[a]	(59)	(85)	531	1,072	(499)

Table A.4: ***PLH-Sector Revenue and Expenditure Per Capita, 1961-89: British Columbia***

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	2,480	4,736	9,319	16,286	25,002
Revenue					
Direct taxes on persons	12	158	323	730	1,140
Direct taxes on corporations and government business enterprises	3	43	129	174	176
Indirect taxes	217	434	856	1,447	2,106
Other transfers from persons	9	47	65	112	253
Investment income	26	76	193	447	885
Transfers from federal government	91	142	296	403	734
Current revenue	358	901	1,862	3,312	5,294
Capital consumption allowances	31	54	103	178	241
Total revenue	389	955	1,965	3,490	5,535
Taxation	240	683	1,373	2,462	3,675
Own-source current revenue	206	759	1,566	2,909	4,560
Expenditure					
Current goods and services	231	558	1,236	2,291	3,133
Transfers to persons	50	139	286	491	860
Transfers to business	9	35	102	224	233
Interest on public debt	16	43	92	195	646
Current expenditure	306	775	1,715	3,202	4,872
Capital formation	93	154	267	374	536
Total expenditure	399	929	1,983	3,576	5,407
Surplus (deficit)[a]	(10)	27	(18)	(86)	128

Table A.4: *PLH-Sector Revenue and Expenditure Per Capita, 1961-89: Yukon and Northwest Territories*

(Provincial Economic Accounts basis)

	1961	1971	1976	1981	1989
			(dollars)		
GDP at market prices	2,432	5,321	9,369	17,837	36,833
Revenue					
Direct taxes on persons	0	0	31	750	1,128
Direct taxes on corporations and government business enterprises	0	0	0	116	205
Indirect taxes	81	264	446	682	1,077
Other transfers from persons	0	0	15	58	51
Investment income	0	19	77	354	551
Transfers from federal government	54	1,208	3,308	5,994	13,218
Current revenue	135	1,491	3,877	7,954	16,231
Capital consumption allowances	0	38	169	639	1,538
Total revenue	135	1,528	4,046	8,592	17,769
Taxation	81	264	482	1,625	2,462
Own-source current revenue	81	283	569	1,960	3,013
Expenditure					
Current goods and services	108	1,415	3,031	5,994	10,850
Transfers to persons	0	94	169	392	869
Transfers to business	0	0	169	639	1,256
Interest on public debt	0	75	46	87	64
Current expenditure	108	1,585	3,415	7,112	13,039
Capital formation	54	340	831	1,306	2,782
Total expenditure	162	1,925	4,246	8,418	15,821
Surplus (deficit)	(27)	(396)	(200)	174	1,948

Table A.5: ***Provincial and Local Debt-to-GDP Ratios, 1980-89***

(Financial Management System basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Newfoundland	-46.7	-45.3	-44.4	-46.5	-47.3	-47.8	-47.1	-45.5	-44.2	-42.2
Prince Edward Island	-21.3	-17.8	-20.6	-17.9	-16.3	-17.0	-16.3	-16.8	-15.7	-14.9
Nova Scotia	-21.9	-25.0	-25.8	-25.9	-27.1	-27.8	-27.3	-27.1	-28.1	-28.3
New Brunswick	-24.1	-23.1	-27.3	-27.6	-27.4	-28.4	-27.2	-28.1	-27.6	-25.8
Quebec[a]	-26.9	-26.6	-29.7	-31.1	-32.8	-36.7	-37.1	-36.7	-35.4	-35.1
Ontario	-13.2	-12.5	-14.1	-14.5	-14.1	-15.3	-14.7	-13.9	-12.3	-11.1
Manitoba	-9.2	-11.1	-13.2	-16.0	-17.6	-22.8	-28.0	-30.1	-26.4	-25.3
Saskatchewan	8.7	8.1	6.0	4.0	1.1	-3.0	-10.0	-12.8	-14.7	-13.8
Alberta	22.1	22.9	20.2	20.2	22.2	20.5	15.8	12.9	9.7	6.0
British Columbia	0.7	-0.2	-3.5	-5.8	-7.1	-7.9	-8.2	-7.4	-5.9	-4.9
Yukon and Northwest Territories	3.4	6.0	5.3	9.0	8.6	8.8	10.8	10.0	9.4	7.9
Total PLH Sector	-8.5	-9.1	-11.5	-12.7	-13.2	-15.2	-16.9	-17.1	-16.3	-15.9
Federal	-29.4	-29.9	-35.1	-41.4	-46.4	-50.4	-53.8	-54.4	-54.5	-54.9

Table A.6: *Provincial and Local Deficit (Surplus)-to-GDP Ratios, 1975–89*

(Financial Management System basis)

	Average 1975–1976	Average 1977–1981	Average 1982–86	Average 1987–88	1989
Newfoundland	-7.9	-4.3	-4.4	-1.7	-0.8
Prince Edward Island	-1.6	-2.6	-1.6	-0.6	-0.1
Nova Scotia	-2.2	-3.0	-3.3	-3.0	-3.2
New Brunswick	-3.9	-1.8	-3.3	-1.2	-0.3
Quebec	-2.7	-3.0	-3.9	-2.2	-1.9
Ontario	-2.7	-1.4	-1.5	0.0	0.3
Manitoba	-1.9	-1.6	-2.7	0.0	0.3
Saskatchewan	0.5	0.6	-3.6	-2.1	-0.3
Alberta	2.4	6.3	-0.6	-2.7	-3.1
British Columbia	-1.7	0.1	-2.3	0.7	0.9
Yukon & Northwest Territories	-0.6	1.2	1.7	-1.3	-2.3

Table A.7: *PLH-Sector Own-Source Revenue, 1979 and 1980*
(Provincial Economic Accounts basis)

	Nfld.	P.E.I.	N.S.	N.B.	Que.[a]	Ont.	Man.[b]	Sask.	Alta.	B.C.	Terr.	Canada
					(millions of current dollars)							
1979												
Personal income tax	160	32	274	204	3,638	3,195	281	301	701	1,201	20	10,029
Corporate income tax	33	4	52	60	587	1,100	114	105	527	580	8	3,170
Other corporate taxes	0	0	0	0	112	249	15	0	0	53	0	429
Health & social insurance levies	18	3	25	15	[illegible]	1,980	25	46	228	394	11	3,295
Property taxes	45	16	171	109	2,158	3,344	415	325	716	1,104	13	8,416
Retail sales tax	212	30	200	160	1,703	2,641	258	257	22	705	3	6,231
Gasoline tax	43	10	68	59	481	712	77	86	8	206	6	1,726
Royalties	17	0	1	6	46	64	28	521	3,310	520	0	4,526
Other resource revenue	1	0	0	0	4	5	2	64	439	38	0	553
Interest	67	14	101	74	488	1,395	229	232	1,038	427	11	3,988
Miscellaneous revenue	87	16	153	80	1,478	1,832	210	264	526	769	16	5,431
Total	683	125	1,046	800	11,651	16,057	1,685	2,201	7,585	6,085	88	47,986
1980												
Personal income tax	404	100	763	610	7,801	11,860	1,010	940	2,241	3,146	88	28,961
Corporate income tax	61	16	116	105	584	2,718	217	127	880	528	16	5,368
Other corporate taxes	4	1	7	8	840	672	74	85	0	18	0	1,709
Health & social insurance levies	48	4	62	60	3,786	4,140	275	65	560	916	18	9,934
Property taxes	125	41	360	280	3,821	8,721	605	773	2,007	2,403	32	18,511
Retail sales tax	578	111	710	640	5,031	8,240	786	881	228	2,102	11	20,150
Gasoline tax	80	17	124	110	1,244	1,644	202	158	312	552	13	4,456
Royalties	22	0	2	35	120	180	28	357	2,061	788	1	3,605
Other resource revenue	2	0	1	1	8	10	3	38	210	56	0	330
Interest	206	53	311	244	2,404	3,112	882	666	3,284	1,627	36	12,817
Miscellaneous revenue	186	27	325	180	3,886	5,107	456	1,367	1,382	1,735	20	14,677
Total	1,719	370	2,820	2,286	29,709	47,404	4,670	5,251	13,253	13,822	235	121,839

Table A.8: *PLH-Sector Own-Source Revenue Per Capita, 1979 and 1989*

(Provincial Economic Accounts basis)

	Nfld.	P.E.I.	N.S.	N.B.	Que.[a]	Ont.	Man.[b]	Sask.	Alta.	B.C.	Terr.	*Canada*
						(current dollars)						
1979												
Personal income tax	284	262	325	295	574	371	273	317	371	464	303	*422*
Corporate income tax plus other corporate taxes	59	33	62	87	110	159	125	110	257	248	121	*152*
Health & social insurance levies	32	25	31	22	155	184	24	48	111	148	167	*139*
Property taxes	80	131	203	149	340	393	404	342	349	461	197	*358*
Retail sales tax	376	246	238	275	269	311	261	270	11	272	45	*262*
Gasoline tax	76	82	81	85	71	84	75	90	4	80	91	*73*
Royalties plus other resource revenue	32	0	1	9	8	8	30	615	1,830	216	0	*214*
Interest	119	115	120	107	77	154	223	244	506	165	167	*168*
Miscellaneous revenue	154	131	182	129	233	227	204	278	256	297	242	*233*
Total	*1,211*	*1,025*	*1,242*	*1,156*	*1,838*	*1,890*	*1,620*	*2,314*	*3,696*	*2,350*	*1,333*	*2,021*
1989												
Personal income tax	708	769	895	848	1,181	1,238	938	933	925	1,030	1,128	*1,110*
Corporate income tax plus other corporate taxes	114	131	139	157	213	354	268	220	371	182	205	*271*
Health & social insurance levies	86	31	70	83	566	432	253	66	243	300	231	*380*
Property taxes	219	315	416	408	571	910	853	768	828	787	410	*744*
Retail sales tax	1,012	854	801	890	752	965	724	656	94	708	141	*769*
Gasoline tax	140	131	140	153	186	172	186	157	129	181	167	*170*
Royalties plus other resource revenue	42	0	3	50	19	20	29	383	950	270	13	*150*
Interest	361	408	351	339	371	325	813	663	1,359	533	462	*493*
Miscellaneous revenue	329	208	367	250	581	533	422	1,357	570	568	256	*560*
Total	*3,011*	*2,846*	*3,163*	*3,179*	*4,439*	*4,949*	*4,488*	*5,214*	*5,470*	*4,560*	*3,013*	*4,646*

Table A.9: ***PLH-Sector Own-Source Revenue as a Proportion of Total Revenue, 1979 and 1989***

(Provincial Economic Accounts basis)

	Nfld.	P.E.I.	N.S.	N.B.	Que.[a]	Ont.	Man.[b]	Sask.	Alta.	B.C.	Terr.	*Canada*
						(percent)						
1979												
Personal income tax	23.4	25.6	26.2	25.5	31.2	19.6	16.9	13.7	10.0	19.7	22.7	*20.9*
Corporate income tax plus other corporate taxes	4.8	3.2	5.0	7.5	6.0	8.4	7.7	4.8	6.9	10.5	9.1	*7.5*
Health & social insurance levies	2.6	2.4	2.5	1.9	8.4	9.7	1.5	2.1	3.0	6.3	12.5	*6.9*
Property taxes	6.6	12.8	16.3	12.9	18.5	20.8	24.9	14.8	9.4	19.6	14.8	*17.7*
Retail sales tax	31.0	24.0	19.1	23.8	14.6	16.4	16.1	11.7	0.3	11.6	3.4	*13.0*
Gasoline tax	6.3	8.0	6.5	7.4	3.9	4.4	4.6	3.9	0.1	3.4	6.8	*3.6*
Royalties plus other resource revenue	2.6	0.0	0.1	0.8	0.5	0.4	1.9	26.6	49.5	9.2	0.0	*10.6*
Interest	9.8	11.2	9.7	9.3	4.2	8.1	13.8	10.5	13.7	7.0	12.5	*8.3*
Miscellaneous revenue	12.7	12.8	14.6	11.1	12.7	12.0	12.6	12.0	6.9	12.6	18.2	*11.5*
1989												
Personal income tax	23.5	27.0	28.1	26.7	26.6	25.0	20.9	17.9	16.9	22.6	37.4	*23.9*
Corporate income tax plus other corporate taxes	3.8	4.6	4.4	4.9	4.8	7.2	6.0	4.2	6.8	4.0	6.8	*5.8*
Health & social insurance levies	2.9	1.1	2.2	2.6	12.8	8.7	5.6	1.3	4.5	6.6	7.7	*8.2*
Property taxes	7.3	11.1	13.1	12.8	12.9	18.4	19.0	14.7	15.1	17.3	13.6	*16.0*
Retail sales tax	33.6	30.0	25.2	28.0	16.9	19.5	16.1	12.6	1.7	15.5	4.7	*16.5*
Gasoline tax	4.7	4.6	4.4	4.8	4.2	3.5	4.1	3.0	2.4	4.0	5.5	*3.7*
Royalties plus other resource revenue	1.4	0.0	0.1	1.6	0.4	0.4	0.7	7.5	17.4	5.9	0.4	*3.2*
Interest	12.0	14.3	11.0	10.7	8.4	6.6	18.1	12.7	24.9	11.7	15.3	*10.6*
Miscellaneous revenue	10.9	7.3	11.5	7.9	13.1	10.8	9.4	26.0	10.4	12.5	8.5	*12.0*

Table A.10: *Shares of Gross Domestic Product by Sector, 1971 and 1985*
(System of National Accounts basis)

	Newfoundland		P.E.I.		Nova Scotia		New Brunswick	
	1971	**1985**	**1971**	**1985**	**1971**	**1985**	**1971**	**1985**
	(percent of provincial total)							
Goods-Producing Sectors								
Primary								
Agriculture, forestry, fishing	3.8	3.5	9.7	10.1	3.8	4.2	4.4	4.8
Mining, quarries, oilwells	11.0	8.5	0.0	0.1	0.8	2.0	2.1	1.2
Total primary	*14.8*	*12.0*	*9.7*	*10.2*	*4.6*	*6.3*	*6.5*	*6.0*
Secondary								
Manufacturing	9.2	7.8	7.9	6.9	12.2	11.8	15.2	12.7
Construction	18.2	10.0	10.3	8.9	8.7	9.1	9.0	6.2
Utilities and nonbusiness	3.3	6.4	2.2	3.2	3.2	3.2	2.9	5.9
Total secondary	*30.7*	*24.0*	*20.4*	*18.9*	*24.1*	*23.1*	*27.1*	*24.6*
Total goods-producing sectors	*45.5*	*36.1*	*30.1*	*29.2*	*28.7*	*30.3*	*33.7*	*30.8*
Services-Producing Sectors								
Accommodation and food	2.6	2.2	3.1	3.5	2.4	2.5	2.2	2.5
Business services to forestry	0.1	0.2	0.0	0.1	0.2	0.1	0.2	0.3
PLH services	14.1	20.2	19.4	21.8	15.9	18.2	15.4	18.3
Other services	37.8	41.3	47.3	45.4	52.8	48.8	48.5	48.1
Total services-producing sectors	*54.5*	*63.9*	*69.9*	*70.8*	*71.3*	*69.7*	*66.3*	*69.2*

Table A.10: ***Shares of Gross Domestic Product by Sector, 1971 and 1985 - continued***
(System of National Accounts basis)

	Quebec		**Ontario**		**Manitoba**	
	1971	**1985**	**1971**	**1985**	**1971**	**1985**
			(percent of provincial total)			
Goods-Producing Sectors						
Primary						
Agriculture, forestry, fishing	2.4	2.5	2.3	2.1	7.4	8.0
Mining, quarries, oilwells	1.9	0.9	1.8	1.2	3.8	2.7
Total primary	*4.3*	*3.4*	*4.2*	*3.4*	*11.2*	*10.7*
Secondary						
Manufacturing	25.8	21.4	29.2	27.2	13.0	11.3
Construction	7.1	5.9	6.4	5.1	7.3	6.1
Utilities and nonbusiness	2.6	4.7	2.4	2.9	2.9	3.6
Total secondary	*35.4*	*31.7*	*38.0*	*35.1*	*23.2*	*21.0*
Total goods-producing sectors	*39.7*	*35.3*	*42.2*	*38.6*	*34.4*	*31.9*
Services-Producing Sectors						
Accommodation and food	2.6	2.4	2.0	2.4	2.8	2.7
Business services to forestry	0.1	0.1	0.1	0.0	0.0	0.0
PLH services	14.7	15.2	11.9	12.8	13.0	15.9
Other services	42.9	47.1	43.8	46.2	49.8	49.4
Total services-producing sectors	*60.3*	*64.7*	*57.8*	*61.4*	*65.6*	*68.1*

Table A.10: ***Shares of Gross Domestic Product by Sector, 1971 and 1985 - continued***
(System of National Accounts basis)

	Saskatchewan		**Alberta**		**British Columbia**		**Canada**	
	1971	**1985**	**1971**	**1985**	**1971**	**1985**	**1971**	**1985**
				(percent of provincial total)				
Goods-Producing Sectors								
Primary								
Agriculture, forestry, fishing	24.2	12.0	6.6	3.0	5.3	3.9	4.2	3.3
Mining, quarries, oilwells	8.8	14.1	14.5	29.2	2.8	3.2	3.5	6.2
Total primary	*33.0*	*26.0*	*21.1*	*32.6*	*8.1*	*7.1*	*7.7*	*9.5*
Secondary								
Manufacturing	5.5	5.2	8.9	7.5	17.4	13.0	22.7	18.9
Construction	7.3	7.8	9.7	6.4	9.6	6.8	7.6	6.1
Utilities and nonbusiness	2.8	2.7	2.3	2.9	2.5	3.4	2.5	3.5
Total secondary	*15.7*	*15.5*	*20.9*	*16.6*	*29.5*	*23.1*	*32.6*	*28.3*
Total goods-producing sectors	*48.7*	*41.7*	*42.1*	*49.3*	*37.6*	*30.3*	*40.5*	*38.0*
Services-Producing Sectors								
Accommodation and food	2.3	2.4	2.5	2.0	3.2	3.1	2.4	2.4
Business services to forestry	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1
PLH services	13.7	14.8	12.6	10.4	11.0	12.0	12.9	13.5
Other services	35.2	41.1	42.8	38.2	48.0	54.4	44.1	46.0
Total services-producing sectors	*51.3*	*58.3*	*57.9*	*50.7*	*62.4*	*69.7*	*59.5*	*62.0*

Notes and Sources for Appendix A

Figure A.1

Note: The provinces' GDP were deflated by their respective implicit price index for final domestic demand.

Source: Author's calculations, using data from Statistics Canada, Historical Labour Force Statistics and Provincial Economic Accounts.

Figure A.2

Note: For Quebec only, own-source revenue and transfers were adjusted for the value of tax abatement.

Source: Author's calculations, using data from Statistics Canada, Provincial Economic Accounts.

Figure A.3

Source: Author's calculations, using data from Statistics Canada, Provincial Economic Accounts.

Table A.1

[a] Revenues adjusted for contributions to public service superannuation funds; expenditures adjusted for public service superannuation funds.

Source: Statistics Canada, Provincial Economic Accounts; data on population are from the National Income and Expenditure Accounts, Annual Estimates.

Tables A.2, A.3, A.4

Sources: Author's calculations, using data from Statistics Canada, Provincial Economic Accountsl population data are from the National Income and Expenditure Accounts, Annual Estimates.

Table A.5

Note: Provincial balance sheet data for 1988 and 1989 are author's estimates and should be seen only as indicative of the trend.

[a] Excludes Quebec Pension Plan net assets.

Sources: Author's calculations, using data from Statistics Canada, Provincial Economic Accounts (provincial GDP); Public Institutions Division (net debt/financial assets); National Income and Expenditure Accounts (Canada GDP); and Canada, Deptartment of Finance, *Public Accounts*, Vol.1, 1990 (federal debt).

Table A.6

Sources: Author's calculations, using data from Statistics Canada, Provincial Economic Accounts (provincial GDP); Public Institutions Division (deficits/surpluses).

Tables A.7, A.8, A.9

[a] Personal income tax and transfers adjusted for tax abatement and payroll taxes; payroll taxes are added to health and social insurance levies.

[b] Payroll levy has been excluded from miscellaneous revenue and included in health and social insurance levies.

Sources: Statistics Canada, Provincial Economic Accounts (provincial revenues and GDP); Public Institutions Division and Manitoba Budgets (Quebec and Manitoba health insurance levies); Canada, Department of Finance (value of Quebec tax abatement).

Table A.10

Source: Author's calculations, using data from Statistics Canada, Provincial Gross Domestic Product by Industry 1984–1985.

Appendix B

Federal-Provincial Constitutional and Economic Relations

Introduction

Taxation and the delivery of services in Canada have been characterized by duplication, intervention, and competition for decades. When economic times are good, there is a tendency to see common activities as good for the country, but when times get tougher, the complaints become louder and irritations more stressful.

To a great extent, every aspect of provincial, local, and hospital (PLH) finance — deficits, debts, expenditure, and revenue — is linked with the federal government's fiscal policies. The formal arrangements and specific areas of interaction, however, deserve separate treatment here.

The federal government plays a major role in trying to reduce regional income disparities through equalization payments and regional development programs. In addition, two major thrusts of federal influence over provincial program and revenue structures have evolved over the years. One is the cost-sharing of programs, which the federal government correctly assumes gives it the right to have a say about how the money is spent. The other is the tax-collection agreements, which have resulted in a tax structure that is virtually determined by the central government regardless of the goals and priorities of the provinces.

Having one level of government set the base and do the collection in a particular tax field has important advantages, not the least of which is the minimization of the costs of administration, enforcement, and compliance. The tax-collection agreements have likely resulted in a simpler tax system and more tax harmony than would otherwise be the case, although the system of having the participating provinces levy a tax on the federal tax rather than a tax on the federal base has unnecessarily reduced the provincial governments' policy options. This limitation and the present allocation of spending and taxing powers present obstacles to the realization of a harmonized social welfare system that would link taxes and transfers, enabling Canada to bring income support into the next century with a guaranteed annual income.

New approaches are now needed, as well as a rethinking of federal-provincial arrangements using both equity and efficiency criteria. Consider the division of the tax fields, for example. The equity problem of a government's taxing economic activity that occurs outside its jurisdiction could be sharply reduced by assigning tax fields such as corporate income to the central government. On the other hand, taxes that are subject to substantial interprovincial competition, such as sales taxes, could be assigned to provincial governments. In a field that has to be shared, efficiency would be maximized by the agreement on a common base and the collection by one level only.

Historical Background

The Meech Lake discussions became a catalyst for all provincial grievances, resulting in a focus on all that is wrong with the federation and not enough on what is right. Although most features of fiscal federalism could be rearranged without a change to the Constitution, they have become enmeshed in the overall federal debate with the result that the beneficial aspects of federal-provincial cooperation may be overlooked. Perhaps, however, it finally clarified what Ontario observed a decade earlier: "Official federal thinking continues to turn on the traditional distinction between the federal and provincial orders of government, but this is no longer the axis upon which fiscal federalism is evolving in Canada."[1]

Constitutional Arrangements

The division of responsibilities and taxing powers in Canada was originally defined in the *British North America Act* of 1867.[2] The fathers of Confederation assigned the provincial governments responsibility for all matters of a local or private nature, such as education, welfare, public lands, property, and municipal government, while the federal government was given exclusive responsibility for defense, foreign affairs, and all areas not specifically assigned to the provinces. A variety of responsibilities not specified were clarified over the years by the Privy Council; what proved a major allocation came in the mid-1930s when power over social legislation was assigned to the provinces. In spite of clarifications and reassignments of responsibilities for more than a century, a number of functions — for example, justice, agriculture, and natural resources — still fall into both federal and provincial jurisdictions.[3] These overlaps are undoubtedly responsible for inefficiencies in administration as a whole.

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[1] Ontario, Budget 1982, Budget Paper B, p. 43.

[2] For a detailed account of the history of constitutional developments, see A. Milton Moore, J. Harvey Perry, and Donald I. Beach, *The Financing of Canadian Federation, The First Hundred Years* (Toronto: Canadian Tax Foundation, 1966); and J. Harvey Perry, *A Fiscal History of Canada: The Postwar Years* (Toronto: Canadian Tax Foundation, 1989).

On the revenue side, the federal government was originally given unlimited taxing powers, while the provincial governments were restricted to taxes levied directly, such as on property or income.[4]

In the 19th century, the provincial governments' responsibilities were far less important than the federal government's. For most of the present century, however, it was the provincial responsibilities that saw the greatest expansion. Revenue sources also shifted in importance. At the time of Confederation, direct taxes were negligible and were expected to remain so. In the 20th century, direct taxation, particularly of income, became more important than such indirect sources as customs duties.[5]

As spending pressures shifted from the federal to the provincial-local levels of government, particularly following World War I, an uncoordinated joint occupancy of some tax fields developed. Then came the assignment of social legislation to the provinces; as Perry observes, they became "responsible for enormous and expensive functions, the cost of which far exceeded their revenue resources."[6] To a large extent, it was the mismatch of revenue and expenditure at the provincial-municipal level that led the provinces to consent in 1940 to the federal government's introduction of a national unemployment insurance plan and gradually to yield their responsibility for the provision of old age pensions.[7]

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[3] For example, provincial governments are responsible for freshwater fisheries, and the federal government is responsible for marine species; in practice, there has been a fair amount of overlap. Both levels of government are involved in support of research in science and technology.

[4] Consequently, it is unconstitutional for the provinces to levy a value-added tax, although a combination of a payroll tax, a capital tax, a corporate tax, and a retail sales tax is virtually equivalent, as Quebec has found.

[5] The property tax remained an important revenue source, as it is today, but one that became virtually the exclusive preserve of local governments.

Meanwhile, the Depression "served to underline the fundamental weaknesses of the Canadian fiscal system" as well as the wide diversity in the pressures on individual provincial finance.[8] In 1937, the severity of these problems prompted the federal government to appoint the Royal Commission on Dominion-Provincial Relations (the Rowell-Sirois Commission). The major thrust of the recommendations of the Commission's 1940 report was for a clear separation of revenue fields and expenditure responsibilities, with unconditional federal grants to the poorer provinces and an end to the per capita subsidies that had been in place since 1867. In particular, it advocated that the personal and corporate income tax fields be left exclusively to the federal government and that the provinces alone occupy the tax fields left to them and be allowed to collect them by direct or indirect means.

Apart from the federal government's introduction of compulsory unemployment insurance in 1941, few of the Commission's recommendations were adopted. Implementation of all of them would, on balance, have increased the power of the federal government; at the same time, however, provincial autonomy would have been enhanced by the elimination of conditional grants. In retrospect, it seems that Canada passed up a golden opportunity to realize a clear demarcation of the expenditure and revenue responsibilities of various levels of government.

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[6] Perry, *A Fiscal History of Canada*, p. 369.

[7] The *Old Age Pensions Act* of 1927 established a system of pensions for which the federal government paid half the cost to any province that signed an agreement. The BNA Act was amended in 1951, paving the way for a federally provided national old age security program. For details, see G.V. Forest, *The Allocation of Taxing Power under the Canadian Constitution* (Toronto: Canadian Tax Foundation, 1981), pp. 24-25.

[8] Ibid.

The Postwar Evolution of Spending Responsibilities

From the 1950s to the 1980s, demand for spending in three of the areas under provincial jurisdiction — health care, education, and welfare — grew faster than the federal government's areas of responsibility, particularly defense and, in the 1970s and 1980s, transportation and communication. Yet, because the provinces had been given sole power over education and social legislation, the federal government could not intervene in the provision of these services without provincial agreement. For their part, the provinces were reluctant to surrender any more powers to the federal government. The federal government did, however, get involved indirectly by initiating, between 1956 and 1967, an elaborate system of cost-sharing programs that served the dual purpose of establishing national standards and relieving the financial pressure on the provinces. This action allowed the federal government to continue to occupy much of the tax room that the provinces had yielded during the war and to influence the development of programs that were provincial responsibilities.

These and other arrangements have since undergone various modifications, as described later in this section. One important variation — opting-out — must be noted here. In the mid-1960s, the federal government set up a procedure whereby provinces could decide not to participate in a number of programs, including hospital insurance, old age assistance, and the Canada Pension Plan (CPP). For shared-cost programs, it offered to provide compensation by reducing its own personal income tax (PIT) so that an opting-out province could increase its PIT rate by an equivalent amount. The Quebec government's desire for as much autonomy as possible prompted it to take full advantage of these provisions. The governments of the other provinces appear to have been more concerned with the adverse financial implications of opting-out.[9] Dissatisfaction with the arrangements has been growing in these nine provinces since the mid-1960s, but none has followed the Quebec government's example of making use of the opting-out provisions.

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[9] Or, in the case of Ontario, to have been convinced that what was good for Canada was good for the province.

The Postwar Evolution of Federal-Provincial Transfers

In federal states, the allocation of expenditure responsibilities is often imperfectly matched by the taxing powers of each jurisdiction; a common solution is for the central government to make transfers to cover the revenue gap. In Canada, the amounts, which are sizable, can be categorized as general purpose transfers (mostly equalization payments) and cost-sharing transfers — mostly under Established Programs Financing (EPF) and the Canada Assistance Plan (CAP) (see Table B.1).

Equalization

Since 1957, Canada has had a formal equalization program whose stated purpose is to "reduce the financial disparities between provinces by augmenting the revenues of the governments of the less wealthy provinces [and]...enable those provincial governments to provide public services without imposing unreasonably high levels of taxation."[10] When the commitment to the principle of equalization was written into the *Constitution Act, 1982*, it included no mention of the objective of reduction of financial disparities, only a confirmation of the often-repeated statement that the payments were to ensure that provincial governments have sufficient resources to provide reasonably comparable levels of public services at reasonably comparable levels of taxation. (As Courchene points out, the wording in the *Constitution Act* is practically the same as that of the

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[10] Canada, Federal-Provincial Relations Office, *Federal-Provincial Programs and Activities: A Descriptive Inventory, 1987–1988* (Ottawa, 1988), p. 13-3. Interestingly, the 1989 and subsequent editions of the same work dropped the reference to the reduction of financial disparities.

Table B.1: ***Major Cash Transfers from the Federal Government to the Provinces, Territories, and Municipalities, fiscal year 1989/90***

Type of Transfer	**Amount**
	(millions of dollars)
General purpose transfers	
Fiscal equalization	7,295
Territorial financial agreements	916
Miscellaneous	631
Established Programs Financing	
Health	6,871
Postsecondary education	2,271
Special purpose transfers	
Canada Assistance Plan	4,779
Other health and welfare	164
Miscellaneous	1,132
Total	*23,896*

Source: Canada, Federal-Provincial Relations Office, *Federal-Provincial Programs and Activities: A Descriptive Inventory, 1989–1990* (Ottawa, June 1990).

Rowell-Sirois Commission's recommendation of "national adjustment grants.")[11]

The evolution of the formula for determining equalization payments has been driven by the objective of raising the revenues of the poorer provinces to some average standard, not of equalizing the cost of some level of basic or comparable services. In fact, the formula cannot ensure that services are comparable across provinces. In oversimplified terms, equalization payments to a particular province make up the difference between the per capita yield of the revenue system of that province and the per capita yield of the representative five-province standard (RFPS) — Alberta and the Atlantic provinces are excluded. The equalization formula has three basic elements: (1) the effective rate for the whole country — the *national standard rate* — of each revenue source; (2) the aggregate *RFPS base* of each revenue source to be equalized; and (3) each individual *province's base* of the same revenue sources. The per capita equalization payment to a particular province, then, is the sum across revenue sources (positive plus negative) of the differences between the aggregate *RFPS base* per capita times the *national standard rate*, and that *province's base* per capita times the *national standard rate*.

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[11] Thomas J. Courchene, *Equalization Payments: Past, Present and Future* (Toronto: Ontario Economic Council, 1984), p. 26. The following section draws on the same work. The reader is referred especially to pp. 61–62 and to the Technical Appendix for a detailed discussion of the operation of the equalization formula.

What is being equalized, therefore, is a province's fiscal capacity — the revenue it *could* raise if each per capita revenue base it has actually matched the average of the corresponding RFPS base and if it taxed it at the national standard rate — and not its tax effort — that is, the revenue it actually *does* raise from each revenue source in the formula. As Table B.2 illus-trates, there can be a big difference between the two. Nova Scotia's tax effort, for example, was less than its fiscal capacity in fiscal year 1989/90, while New Brunswick's was greater, as were all the other recipient provinces.

The focus on reducing disparities has repeatedly left the federal government at the mercy of increases in revenue bases in nonrecipient provinces or rates in any province (what Courchene has called the "implicit open-ended nature of the equalization formula.")[12] This focus, as well as the failure of the public accounts systems to distinguish between the asset and income aspects of resource receipts, has caused the federal government a lot of grief in trying to come up with a formula for calculating the payments that does not give rise to unaffordable equalization expenditure.

That formula has undergone a number of revisions (see Table B.3); the present version is largely the result of changes introduced in 1967 and 1982. The 1967 reform expanded the tax sources covered to 16 from the original three and thus ushered in a representative tax system of equalization payments.[13] It also switched the

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[12] Ibid., p. 52.

[13] Ibid., p. 48.

Table B.2: ***The Fiscal Capacity and Tax Effort of the Provinces, fiscal year 1989/90***

	Fiscal Capacity From:		
	Own-source revenue	Own-source revenue + equalization	Tax Effort
		(all-Canada average = 100)	
Newfoundland	62.7	91.5	99.8
Prince Edward Island	64.4	91.5	92.1
Nova Scotia	74.9	91.5	90.4
New Brunswick	71.1	91.5	97.6
Quebec	86.0	91.5	111.2
Ontario	111.2	104.3	103.2
Manitoba	79.1	91.5	107.4
Saskatchewan	83.8	91.5	107.5
Alberta	130.5	122.3	74.4
British Columbia	106.5	98.5	93.1

Note: Fiscal capacity is calculated by applying average Canadian tax rate to standardized bases of each revenue source included in the equalization formula. When all government transfers are added to own-source revenue, the differences between the fiscal capacities of the "have" and "have-not" provinces are reduced even further. The federal Department of Finance has not done this calculation since fiscal year 1987/88.

Source: Canada, Department of Finance.

per capita standard for "reasonable levels of taxation" from an average of the two wealthiest provinces to a national average. The 1982 fiscal arrangements replaced this national standard with a five-province standard; the other component of the formula, the average rate to be applied to each revenue base, remained national. Another serious flaw in the equalization formula — which allowed Ontario to become eligible for payments — was dealt with by Bill C-24, which virtually excludes Ontario. As an overall restraint on the cost of equalization, total payments were not to grow faster than GNP from 1983 on.[14]

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[14] The modification of the standard was made to keep the cost of equalization — which had been inflated by Alberta's energy revenues in the 1970s — to a manageable level. The bill provides for the exclusion of any province whose per capita personal income is larger than the national average in the current year and in the preceding two years.

Since the money to pay for the equalization program comes from general federal revenue or borrowing, rather than from the wealthier provinces directly, the direction of redistribution can be difficult to identify precisely.[15] All one can say is that before the mid-1970s there was an indirect redistribution from the more-advantaged provinces to the less-advantaged ones, but it was not entirely clear which provinces were making the contribution. With the enormous federal deficits of recent years, it has become even more uncertain who actually finances equalization. Federal borrowing can be attributed to that program just as easily as to any other expenditure. It would even be possible for a "have-not" province to pay back the cost of its equalization in the future, once the federal government achieves a surplus and the costs of servicing the past federal loans are taxed back.

Cost-Sharing

Throughout the years, the federal government has entered into a number of shared-cost programs and activities — a total of 333 in 1989.[16] Some, such as those covered by EPF, have an enormous fiscal impact on all or most provinces, while others, such as the Canada-Manitoba Nelson River Transmission Agreements, have only a minor local effect. In many cases, funding is conditional on expenditure by other entities, so the final cost of the programs exceeds their dollar cost to the federal and provincial governments.

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[15] For example, for most of the 1960s, according to the Provincial Economic Accounts (PEA), the excess of federal revenues collected in Quebec and Ontario over federal spending in those provinces was larger than the total cost of equalization. In fact, Quebec's federal surplus exceeded its own equalization receipts in some years.

In the first half of the 1970s, surpluses in the three "have" provinces were more than adequate to cover equalization. from the mid-1970s to the mid-1980s, however, only Alberta had consistently sizable surpluses, so that in most years equalization payments were larger than the aggregate federal surplus in the "have" provinces. From 1986 to 1989, the surpluses shown for Alberta and Ontario combined cover only about half of the equalization transfers on average. These balances can give only a rough idea of the indirect redistribution among provinces because of the serious allocation problems in the accounts, especially of interest on the public debt. See Statistics Canada, *Provincial Economic Accounts*, 1985–1989, Cat. no. 13-213, pp. xxxv–xlii, and Table 6.

[16] Canada, Federal-Provincial Relations Office, *Federal-Provincial Programs and Activities: A Descriptive Inventory, 1989–1990* (Ottawa, 1990), p. 34-1.

Table B.3 documents the timing of the major shared-cost programs in postsecondary education, health care, and welfare. Although they were set up so the federal government's share was 50 percent of spending nationally, an element of equalization was built into the formula for education and health care.[17]

More or less from the outset, these supposedly cooperative programs faced two kinds of serious tension, one arising from the federal government's desire for national standards and the other from the growing fiscal burden on both levels of government.

Establishing and enforcing national standards has been a frequent sore point. When what came to be called the established programs — postsecondary education and health care — were switched to block-funding, the *Established Programs Financing Act* of 1977 ostensibly made these grants unconditional. Yet when some provinces, in an effort to deal with rising health-care costs, permitted extra-billing or introduced user charges, the federal government responded by withholding part of the transfer entitlements and then by passing the *Canada Health Act* of 1984 to enforce national standards. The 1991 federal budget speech promised to introduce legislation to give the government the means to ensure that the principles of the act would be adhered to.

The course of the CAP has been rather less stormy, but perhaps from the federal point of view even less successful in achieving uniformity. When the plan was instituted in 1966 (replacing a variety of welfare programs that had separate federal-provincial agreements), the federal government agreed to pay 50 percent of provincial expenditure classified as social assistance by its officials and to

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[17] The formula also provided a disincentive for smaller provinces to increase expenditure. Full national equalization meant that an increase in federal transfers to all provinces caused by a single province's increase was proportionate to that province's weight in the whole country. Thus, before 1977, an extra dollar spent by a weaker province brought a matching federal dollar only if all the provinces increased their spending simultaneously and uniformly.

Table B.3: ***Key Changes in Federal-Provincial Fiscal Arrangements, 1941–90***

1941 to 1946	
1941	Wartime tax-rental agreements. Provinces agree to vacate PIT, CIT, and estate tax fields in exchange for annual rental payments from federal government.
1947 to 1951	
1947	Tax-rental agreements are renewed by all provinces but Quebec and Ontario, which choose grant and subsidy options in lieu of taxes. Quebec and Ontario impose 7 percent CIT.
1949	Newfoundland enters Confederation.
1950	Ontario enacts PIT of 5 percent of federal tax payable; legislation not proclaimed.
1951	Federal grants are made available to universities. Quebec refuses its universities permission to accept them on the grounds that they are an invasion of provincial autonomy.
1952 to 1956	
1952	Most provinces renew tax-rental agreements, and Ontario rejoins CIT scheme. Federal government agrees to pay them a yield of PIT at 5 percent of 1948 federal rates and of CIT at 9 percent. Quebec continues to levy its own CIT.
1954	Quebec introduces its own PIT at 15 percent of federal rates.
1956	*Unemployment Assistance Act* allows cost-sharing in assistance payments for "employable" unemployed.
1957 to 1961	
1957	New tax-sharing agreements give provinces rights to revenue from income taxation raised within their own borders. Federal government offers to reduce its own taxes to make room for any province to levy its own taxes, while leaving combined tax rate unchanged (abatement). It also offers to collect the taxes without charge if the province uses the same tax bases and rate structure as the federal government. If they prefer, provinces may continue to "rent" PIT, CIT, and succession duties. All provinces but Quebec sign the rental agreements for the PIT. Ontario does not sign for the CIT.
1957	Equalization program is introduced; federal government agrees to pay an unconditional grant to bring per capita yield from PIT, CIT, and succession duties up to average per capita yield in Ontario and British Columbia.
1960	By year-end, all provinces agree to join shared-cost hospital insurance and diagnostic service plan. Quebec is granted a 1 percentage point CIT abatement in lieu of grants to universities.

Table B.3: *Key Changes in Federal-Provincial Fiscal Arrangements, 1941–90 - continued*

1962 to 1966

1962	*Federal-Provincial Fiscal Arrangements Act* becomes effective. Tax-collection agreements return direct taxation fields to provinces through an abatement of federal tax points. Provinces agree to levy a single rate of tax as a percentage of federal tax revenue. Quebec does not sign a tax-collection agreement.
1965	*Established Programs (Interim Arrangements) Act* allows provinces to opt out of health-care and education arrangements. Part of federal cash transfer can be exchanged for additional tax room. Only Quebec opts out of these programs.
1966	Federal medicare act introduces national shared-cost medicare.
	Canada Assistance Plan (CAP) is introduced on a shared-cost basis to consolidate various social assistance payments to provinces, introduced mostly in the 1950s (assistance for the blind, disabled, elderly, unemployed, and unemployable).

1967 to 1971

1967	Equalization formula is changed to cover 16 revenue categories, to be equalized to a national average per capita capacity.
	Shared-cost program for universities and postsecondary education is introduced. Provinces are given part of the federal share in additional tax-abatement points (tax transfers) and part in cash.

1972 to 1976

1972	Equalization formula is amended to cover 19 itemized revenue sources.
	Federal tax reform: federal government gives provinces a revenue guarantee to compensate them for loss of revenue.
1973	Federal government proposes block funding of health-care and education programs, but the provinces turn it down.
1974	Equalization formula is amended to limit impact of oil price shock.

1977 to 1981

1977	Equalization formula is amended to include 50 percent of nonrenewable resource revenues and a cap on natural resource revenue.
	Federal government introduces EPF, with block funding — that is, general-purpose block grants — of postsecondary education and health. The federal share — part in the form of a tax point transfer and part in cash — is to be escalated by average per capita GNP growth over the three preceding years.

Table B.3: ***Key Changes in Federal-Provincial Fiscal Arrangements, 1941–90 - continued***

1982 to 1986	
1982	Equalization formula is changed to include municipal revenue and 100 percent of nonrenewable resource revenue sources (for a total of 33 itemized revenue sources). A representative five-province standard replaces the national standard for the calculation of per capita tax bases. EPF payments are set at national average per capita in 1975, and are to be escalated in line with per capita GNP. *Constitution Act* replaces *British North America Act* and entrenches the commitment to the principle of equalization.
1983	Federal government caps escalation formula for education part of EPF transfer at 6 and 5 percent for 1983 and 1984, respectively.
1984	*Canada Health Act* replaces *Hospital Insurance and Diagnostic Services Act*, *Medical Care Act*, and *Extended Health Care Act*. It sets out more precise conditions for provinces to qualify for federal transfers — for example, user charges and extra-billing to be offset by a withholding of transfer money.
1986	Federal government limits increase in EPF transfers by reducing average per capita GNP growth by 2 percentage points to achieve savings of $2 billion by 1990/91.
1987 to 1991	
1987	Revenue guarantee is terminated as of April 1.
1989	Federal government limits average per capita GNP growth for EPF transfer formula by a further 1 percentage point beginning April 1, 1990.
1990	Federal government limits growth in CAP transfers to Ontario, Alberta, and British Columbia to 5 percent a year for 1990 and 1991. Per capita EPF transfers for 1990 and 1991 are held to 1989 level. In 1992, growth is to resume at rate of growth of GNP less 3 percentage points. Growth of total EPF transfer — tax point value plus cash — is not to fall below the rate of inflation beginning in 1992.

require that only basic conditions be met.[18] The result has been a national welfare program with virtually no national standards.

The open-endedness of the CAP transfers means that the federal government has had no control over these expenditures.[19] In a deficit-tackling move, the 1990 federal budget capped the payments to the three wealthiest provinces, but British Columbia has since challenged this move as unconstitutional.

The payment formulae for the combined value of tax points and cash transfers have also undergone modifications to ease the fiscal burden and to force the provinces to bear part of the cost of addressing the federal deficit. Thus, the escalators for postsecondary education transfers were restricted to 6 and 5 percent in 1983 and 1984 respectively, instead of the agreed formula; those for both education and health-care transfers were reduced by 2 percentage points in 1986; in 1989, the federal government announced a further 1 percentage point reduction effective in 1990; and in 1990, transfers were frozen for 1990 and 1991.

The move to block- funding for EPF — the result of a decade-long search for a substitute for direct cost-sharing — was itself an effort to improve the potential for federal fiscal planning and to alleviate federal-provincial tensions. As the federal deficit grew, Ottawa's purse strings tightened.

The extent of the formal cost-sharing arrangements demonstrates the close relationship between the finances of the two orders of government and indicates the origin of the recurring expectation that the federal government "must" come up with part of the funds for a number of worthwhile new programs that the provinces wish to initiate. In the past, a pragmatic approach generally prevailed in working out solutions, but the size of the federal deficit is creating greater strains between the two levels of government. Although provinces are now more skeptical about federal offers of cost-sharing because of the fear of being left with rising program costs but a diminished federal financing role, there is no indication that they have stopped looking for help.

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[18] At least one of those conditions — that no province require beneficiaries to complete a period of residence within the province — appears to be unenforceable. Michael J. Trebilcock, Gordon Kaiser, and J. Robert Prichard, "Restrictions on the Interprovincial Mobility of Resources: Goods, Capital and Labour," in *Intergovernmental Relations* (Toronto: Ontario Economic Council, 1977), p. 112.

[19] There was a proposal in 1978 to move to block fund the general welfare assistance part of the program, but it was never implemented.

The Postwar Evolution of Revenue Arrangements

During World War II, the provinces were asked to withdraw from the personal and corporate income tax fields, leaving them to the federal government. Following the war, Quebec and Ontario lost little time in re-establishing their own corporate income tax (CIT) systems.[20] In 1954, Quebec unilaterally re-entered the PIT field. The other provinces continued to receive grants and subsidies in lieu of levying their own PIT's until they entered into income-tax-collection agreements with the federal government in 1962.[21]

Under the terms of the tax-collection agreements, the federal government collects without charge the PIT and CIT for the provinces with each setting its basic rate as a percentage of the federal basic tax. Over the past 15 years, the federal government has agreed to administer, for a charge, a limited number of variations from this simple "rate-on-tax" system, as long as they are broadly applied and simple in design. These "add-ons" now include credits for property and sales taxes, political contributions, and investment in business and home ownership as well as surtaxes and flat taxes. Despite its acceptance of these variations, the federal government still determines the basic structure of the PIT for nine provinces and of the CIT for seven. By locking most of the provinces into the federal government's fiscal goals, the tax-collection arrangements have been more of a constraint on the provinces than, for example, their being banned from imposing indirect taxes.

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[20] Ontario vacated the CIT field in 1952 but returned to it in 1957. In 1981, Alberta also began to administer its own CIT.

[21] The Northwest Territories entered into an agreement in 1978 and the Yukon in 1980.

Interprovincial Issues

Relative Tax Burdens

One advantage of a federal system is that the citizens of each province can determine the mix of public and private goods. Theoretically, Canadians can move to the province with the program mix and tax system that best reflects their tastes. People who prefer a higher-than-average share of publicly provided services should be willing to shoulder a higher-than-average tax burden.

In reality, however, the tax burden does not necessarily reflect the relative size of government expenditure. In 1989, for example, Saskatchewan's tax-revenue-to-GDP ratio was only slightly higher than Manitoba's, but its expenditure-to-GDP ratio was significantly higher. The difference was due to Saskatchewan's larger investment income. Alberta has had much lower tax-to-GDP ratios than British Columbia in recent years, but appreciably larger expenditure ratios because its nonrenewable resource revenue and other investment income were much higher.

Moreover, it is not certain that the residents of a province would want an increase in government-provided services if it meant that their taxes would be appreciably different from those of most of the other provinces. Indeed, many provincial governments are extremely concerned that their tax burdens not be out of line with those of their neighbors, suggesting that they are not sure that their residents would be prepared to pay for a higher level of services or higher costs for the same level.[22] For example, the Quebec government, in its reform of taxation since 1984, has aimed at reducing what it calls the "supplementary tax burden" — the difference between the tax burden under its own tax system and that resulting from the application of Ontario's tax system — particularly for lower-income families.[23] It also reduced its CIT rates, providing a strong incentive for transprovincial corporations to arrange their finances so as to have a larger taxable income component in Quebec than in other provinces.

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[22] Governments may also have reason to be concerned when tax burdens are lower than in other provinces, as Alberta found out. In the 1970s and early 1980s, the combination of an energy boom and low tax rates made migration there from Ontario and other provinces doubly attractive, creating severe pressure on its infrastructure, which was particularly difficult to finance when the flow of migration reversed.

The Effects of Tax Competition

Provinces need to plan cooperatively when formulating tax policy because of the negative effects of import leakages[24] and beggar-thy-neighbor practices. Competition is, however, unlikely to disappear completely, and indeed it likely brings long-term gains in economic efficiency. An individual who can commute between provinces may choose to live in the lower PIT and consumption-tax area but work in the other. An individual for whom it is practical will shop in jurisdictions where consumption taxes are lower. A corporation will move as much taxable income as possible to the lower corporate tax province. Although this tax-avoiding activity imposes an economic cost on the country, the resulting competition is likely to force some fiscal harmonization and lower taxes, which is ultimately beneficial for economic growth.

Federal Issues

It is clearly not a simple matter to achieve a smooth-running fiscal system that involves 11 senior governments. Given Canada's diversity of cultures, geography, and wealth, more than 120 years of Confederation probably reflect recognition that individual provincial economies are stronger in union than on their own. Otherwise, the sometimes bitter disputes might have led to a constitutional crisis earlier.

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[23] According to the province, it succeeded in narrowing the supplementary tax burden — that is, "the percentage by which the tax burden in Quebec exceeds the burden resulting from the application of Ontario's tax system" — to 2 percentage points in 1989, from 10.5 percentage points in 1985; for families with two children and employment income up to $41,550, the PIT burden became lower in Quebec (Quebec, Budget, 1989/90, pp. A-61–62).

[24] For example, inputs to production in one province may be purchased in another where they incur its retail sales tax.

Certainly, the past 30 years have seen examples of both cooperative and uncooperative federalism. Although most of the developments of the 1960s were characterized by cooperation — Maslove, Prince, and Doern suggest it resulted from the increasing affluence of the time[25] — some were contentious. In contrast with the federal-provincial cooperation surrounding the introduction of the national hospital insurance plan, the introduction of medicare was brought in by a minority federal Liberal government, in the face of vigorous opposition by a number of provinces, including Ontario and Quebec.[26] The introduction of the Canada and Quebec pension plans (CPP/QPP) was more the result of Ottawa-Quebec bargaining than of federal-provincial consultation (in fact, Ontario had been opposed to the CPP).[27]

A major factor in the ability of the federal government to obtain agreement from the provinces to many of its initiatives appears to have been that it could sugarcoat the pill with financial incentives. Now that the federal government is strapped for cash, the provincial governments are not so cooperative. Yet the country has probably never needed more federal-provincial fiscal cooperation, embracing such issues as tax harmonization, stabilization policy coordination, joint funding of programs, and information exchange about planned fiscal action or borrowing programs.

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[25] Allan M. Maslove, Michael J. Prince, and G. Bruce Doern, *Federal and Provincial Budgeting*, (Toronto: University of Toronto Press, 1986), p. 30.

[26] For a complete account of the introduction of hospital and medical insurance, see Perry, *A Fiscal History of Canada*, pp. 624–650.

[27] David P. Ross, *The Working Poor — Wage Earners and the Failure of Income Securities Policies* (Ottawa: Canadian Institute for Economic Policy, 1981), pp. 36–37.

The Political Economy of Tax Coordination

An important goal of the tax system should be economic coordination — that is, there ought to be open discussion between the two levels of government about combined federal-provincial tax burdens and compromise about each government's tax structure. The obvious benefits of tax coordination, however, should not blind policymakers and analysts to the advantages to taxpayers from competition between the federal and provincial governments.

When a country has a unitary system of government, citizens may not actually be able to estimate their total tax burden but they are likely to know whom to blame for the taxes they do see. In a federal system, especially one with shared tax fields, it is not always clear which government has levied what part of the tax. From the perspective of taxpayers' perceptions, Canada's fiscal arrangements have generally worked in the provinces' favor. It is the federal government that has had to raise the revenue needed to pay for transfers to the provinces; the PIT split is explicit only at the time of preparing tax returns; and so on.

When the federal government raises its basic PIT or CIT, the signatories automatically get an increase in their revenue. (The flip side is, of course, also true: when the reform of 1987 reduced the basic federal tax, provincial revenue decreased; a number of provinces were unhappy that the federal government had put them in the position of having to increase their taxes to make up for the loss.)

The provinces' involvement in tax-collection agreements also provides them with important benefits — aside from being able to shift some of the blame for revenue increases to the federal government. Although they lose a considerable amount of autonomy in pursuing fiscal objectives, they do not have to bear the cost of administration; the economy gains in efficiency from the high degree of tax harmonization that ensues. Nevertheless, as Albert Breton has warned, "the costs resulting from restriction of competition and over-standardized bases and rates are...no less real even if less direct and palpable."[28]

Quebec is a special case. Its government has long lived with the responsibility for increases in its PIT because of the high priority it has given to fiscal autonomy. The loss of economic efficiency from its separate tax system and the ill will of voters at tax time may be offset by the political harmony fostered within Confederation and from the ability to pursue different social and fiscal objectives.[29]

Overall, the evolution of shared-bases and collection systems in Canada has worked reasonably well. The coexistence of provinces that have separate CIT or PIT systems and those that have opted for tax-collection agreements, as well as the increased willingness of the federal government to accommodate provincial variations in the PIT system, are testimony to the necessity of compromise to accommodate different values and strengths across the Canadian Confederation. Nevertheless, the frequency of critical statements in budget documents — even discounting their political rhetoric — and the recent negative reaction of so many provinces to the imposition of the goods and services tax (GST) suggest increasing provincial irritation with federal domination.[30]

Moreover, the federal-provincial failure to agree on an overall tax burden and appropriate ceilings for the taxation of various bases is an important shortcoming. Before 1967, there was a concept of "standard rates" of personal and corporate direct taxes, with the splits determined at five-year intervals according to spending responsibilities. Since 1967, however, each level of government has been free to set its own rates without regard to the other and without regard to a national ceiling.

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[28] Albert Breton, "Supplementary Statement," in Canada, Royal Commission on the Economic Union and Development Prospects for Canada [Macdonald Commission], *Report*, vol. 3 (Ottawa: Supply and Services Canada, 1985), p. 519.

[29] Quebec has indeed made greater progress in the integration of taxes and transfers than the rest of the country, progress that has realized a benefit in economic efficiency.

[30] Provincial budgets are replete with complaints about the evolution of fiscal arrangements. In 1985, Quebec devoted ten pages to expounding its grievances and 21 in 1986. See also Ontario, Budget, 1985, p. 2.

Two other problems loom: sales taxes and gasoline taxes. Although sales taxes have never been the subject of explicit federal-provincial fiscal arrangements, it appears that when federal revenue from these excise taxes has fallen relative to GDP, the provincial sector has taken up the room vacated. The increase in the provincial share after the early 1960s was facilitated by the strength of the economy and was likely a response to the expansion of PLH services, particularly in areas of health and education. In the past few years, both levels of government have been turning to this base as a means of boosting revenue. The visibility of the federal GST may make it difficult for the provinces to raise their own sales tax rates.

Gasoline taxes have long been relatively important for the provincial governments and were their exclusive preserve until the mid-1970s, when the federal government moved into the field. After the demise of the National Energy Program, the federal government began to exploit its gasoline excise tax vigorously. By 1989, the federal share had reached one-third, compared with just over a tenth five years earlier.

The intermittent federal-provincial battle over taxation turf may have helped to restrain the growth of the overall tax burden.[31] Governments' dislike of being held responsible for tax increases and the fear of losing corporate or individual residents are powerful forces preventing tax burdens from getting out of line. Yet the struggle may also have misdirected provincial energies away from other important activities, such as restructuring the funding of social programs.

Shared-Cost Programs: Health and Education

No federal involvement in education can be justified on constitutional grounds, and there is no strong argument for large-scale involvement in health care either.[32] Granted, the federal government's use of cost-sharing and tax points to persuade provincial governments to undertake nation-wide social programs has brought about a greater convergence of publicly provided goods across the country than might have been the case if its assistance had been neutral. Yet, the alarm that most provincial governments felt in the 1980s over the accelerating costs of health care suggests that Ottawa might have been better advised to leave health-care systems to evolve at the provincial level — as they obviously were already doing — and simply to transfer tax room to assist in the financing. Federal involvement in postsecondary education has not been a good example of federal-provincial cooperation either. The outcome was particularly unfortunate 30 years ago, when Premier Duplessis set Quebec's postsecondary education potential back by refusing federal grants on constitutional grounds.

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[31] As noted in Chapter 3, federal states in the Organisation for Economic Co-operation and Development tend to have lower burdens than unitary states.

The economic rationale for federal participation in provincial areas of responsibility is that spillovers to other provinces would lead to an inadequacy of supply if provision were left entirely to the provinces.[33] Some such externalities exist, although their size may be impossible to measure. Yet the 50-percent share that the federal government paid for postsecondary education and health care until 1977 was almost certainly too large. Furthermore, there is some evidence that education spillovers vary in size across the country, implying that strictly economic considerations would require a different sharing formula for each province.[34]

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[32] The few minor exceptions include the expansion of French-language instruction and jurisdiction over quarantine and the health needs of Indians and Inuit. A case could be made for federal responsibility for public health problems such as epidemics. It is also reasonable for the federal government to want the provinces to have reciprocal arrangements in medical treatment in the interest of efficiency and national unity.

[33] See Robin W. Boadway, *Intergovernmental Transfers in Canada* (Toronto: Canadian Tax Foundation, 1980), for the economic case for shared-cost programs.

[34] Forget, for example, reports that census figures show large interprovincial gains and losses of human capital between 1971 and 1981, with the "have-not" provinces in general losing to the "have" provinces. Claude E. Forget, "Educational Policy Goals for Canada: Major Trade-Offs and Other Issues," in Thomas J. Courchene, David W. Conklin, and Gail C.A. Cook, eds., *Ottawa and the Provinces*, vol. 1, *The Distribution of Money and Power* (Toronto: Ontario Economic Council, 1985), pp. 308–310.

One must also question the practicality of achieving national standards — the federal government's overt reason for intervention. No such standards have been achieved in postsecondary education; a glaring example of their absence is the discrepancy between Quebec and Ontario university fees. In medical care, examples of direct billing of out-of-province patients call into question the enforceability of the *Canada Health Act*.

In recent years, the federal government has made a series of unilateral adjustments to its financial commitment to health and postsecondary education. None of these changes resulted from a re-evaluation of the appropriate sharing of costs — they were an arbitrary way of reducing the federal deficit — but they may offer a good opportunity of doing so. With the increase in total EPF transfers now "permanently" well below GNP growth, the cash component will be squeezed further (because the tax-point component moves with GNP). Yet further erosion of the federal cash-transfer share will jeopardize the national aspects of the established programs.[35] A reasonable arrangement would be to break the link between EPF transfers and tax points and to fix the federal share of the program costs at a level — say, 15 percent — that would cover the estimated externalities without being so high as to tempt the provinces to overspend discounted dollars. Such an approach would permit the provinces to experiment with variations on the delivery of service that might be more efficient and more effective than the present systems.[36] The vital parts of national standards need not go by the boards. The health-care programs are probably mature enough for the federal government to withdraw from its policing role without seriously damaging the most important principles of universality and accessibility. If out-of-province charges become a serious matter, the federal government could reduce its share and reimburse out-of-province patients directly. In postsecondary education, federally enforced reciprocal arrangements are justified only on grounds of equal national accessibility. The provinces would no longer have an incentive to accept out-of-province students at the same fee structure as their own students if the federal share of postsecondary education funding fell too low.

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[35] Quebec, for example, calculated that a continuation of the 1989 formula would reduce its cash transfers from the federal government to zero by 1998 (Quebec, Budget, 1989/90, p. 24).

[36] Such experimentation is particularly called for in health care and needs to be done long before the problem of financing the program becomes critical. See Thomas J. Courchene, *Social Policy in the 1990s: Agenda for Reform*, Policy Study 3 (Toronto: C.D. Howe Institute, 1987), pp. 146–148.

Whether the 15-percent recommendation for EPF is adopted or not, all of the federal-provincial fiscal arrangements should be reevaluated and restructured as soon as possible. If the provinces cannot agree on a new arrangement, the federal government should be free to impose an alternative.

Income-Distribution Programs

The federal government is responsible for much of the cost of income support — all of the guaranteed income supplement and unemployment insurance (UI) benefits and about 50 percent of welfare payments — and the bulk of income-enhancing programs such as old age security (OAS) and family allowances. Yet the cost of social services can be a serious problem for the least-advantaged provincial governments. The CAP design does not deal adequately with uneven pressures, and it is doubtful that equalization payments make up for this lack. Until now, it has been left to the operation of the UI system to offset most of the inadequacies of the CAP. In a high unemployment area, the total of the UI benefits paid has exceeded the contributions, while there were often surpluses in provinces with stronger economies. When these balances are combined with CAP payments, the per capita benefits are well correlated with provincial unemployment rates (see Table B.4).

Nevertheless, the burden of welfare varies widely across provinces, and the present allocation of income-support responsibilities leaves the weaker ones at greater financial risk during downturns. During prolonged periods of high unemployment, when large numbers of people are exhausting their unemployment benefits, the hardest-hit provinces may find that they can meet the increased

Table B.4: ***Provincial Unemployment Rates and Combined UI Balance and Canada Assistance Plan Transfers***

	Unemployment Rate 1986–88	UI + CAP 1987–89	Unemployment Rate 1986–88	UI + CAP 1987–89
	(ranking)		*(average percent)*	*(average $ per capita)*
Newfoundland	1	1	17.8	1,174
Prince Edward Island	2	2	13.2	942
New Brunswick	3	3	13.1	717
Nova Scotia	4	4	11.9	408
British Columbia	5	6	11.6	324
Quebec	6	5	10.2	365[a]
Alberta	7	7	9.1	155
Manitoba	8	9	7.6	127
Saskatchewan	9	8	7.5	152
Ontario	10	10	6.0	-64

Note: The UI balance is the difference between contributions and benefits.

[a] Adjusted for personal income tax abatement.

Sources: Author's calculations, using data from Statistics Canada, *Provincial Economic Accounts*; Canada, Department of Finance, *Quarterly Economic Review* (June 1990).

demand for welfare assistance only by increasing their deficits. If that policy poses a risk of a downgrading of their credit rating however, they have no choice but to increase taxes and exacerbate the downturn.

The recent tightening of the UI program is certain to exacerbate the problem. One solution would be to transfer the responsibility for welfare to the federal government and to integrate its provision with other income-support programs. Even if such a solution is not acceptable to most provinces, a closer integration of taxes, income support, and retraining programs is urgently needed. An obstacle is that welfare programs are operated by the PLH sector while the structure of the PIT system is almost entirely determined by the federal government. It is difficult for the nine provinces that are part of the PIT-collection agreements to move any further in the integration of tax and transfers in their jurisdictions.[37] It would be prefer-able, however, to link the entire federal-provincial tax and income-support network. One way would be to increase federal responsibility for income support, although this approach would run up against the issue of provincial responsibility and autonomy. (Provisions for opting-out would have to be explored.) There is, unfortunately, no simple formula for linkage that would deal adequately with issues of equity, efficiency, and provincial autonomy. The best that can be hoped for is an ongoing move in the "right" direction.

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[37] Quebec, having its own PIT, has been able to move a long way in linking its transfer and tax systems.

Several proposals have been made. As long ago as 1971, a Senate committee recommended that the federal government operate a guaranteed annual income plan divorced from the provision of social services, which would continue to be the responsibility of the provincial governments with cost-sharing under the CAP.[38] In 1985, the Macdonald Commission proposed a guaranteed annual income scheme to replace most federal income-support payments and tax expenditures (excepting the OAS but including federal contributions to provincial social assistance under the CAP).[39] Taking a somewhat different approach, Courchene points out that, if

> the federal government were to...[use]...a "tax on base" rather than "tax on tax" as part of the shared federal-provincial PIT system...the provinces would be able to apply their own rate and bracket structures to the common tax base....Under this scenario, the scope for income testing of provincial welfare payments increases substantially.[40]

Obviously, there is more than one way to integrate taxes and transfers, and there is no shortage of plans from which to choose. The difficulties of assigning expenditure and taxing responsibilities between the provincial and federal governments should not be allowed to interfere with the more important goals of political harmony and economic equity and efficiency.

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[38] Canada, Parliament, Senate, Special Committee on Poverty, *Poverty in Canada* (Ottawa: Information Canada, 1971), pp. xxi–xxii.

[38] Macdonald Commission, *Report*, vol. 2, pp. 794–796.

[40] Courchene, *Social Policy in the 1990s*, p. 126.

Fiscal Equity

The concept of fiscal equity in a federal state is that residents of different regions with similar incomes should have a similar tax burden for similar public services. Yet, as Chapter 4 suggested, there is a huge divergence in economic strength across provinces and consequently great diversity in their ability to raise the revenue to pay for similar services.[41]

Although equalization goes a long way to bridge the fiscal gap between the disadvantaged provinces and the advantaged provinces, it leaves the former with a fiscal capacity below Ontario, Alberta, and British Columbia (see Table B.2). The inequality is emphasized by the measure of tax effort. In nine out of the ten years to 1989, Newfoundland, the poorest province, had a tax effort in excess of the national average, while Alberta's averaged only about three-quarters of that of the country as a whole.

The design of equalization completely ignores interprovincial differences in need, even though many of them are determined by factors — such as demographic composition and structural unemployment — that are beyond the control of provincial governments. For example, provinces with larger shares of unemployment than of GDP might be expected to have larger-than-average social-spending burdens since the number of welfare recipients rises (with a lag) with the number of unemployed.[42] Unfortunately, such provinces are those least able to bear their 50-percent share of welfare costs and may not be able to take as much advantage of the CAP as an affluent province. Thus, from 1984 to 1986, Nova Scotia had one of the highest unemployment rates in the country but CAP payments that were only slightly higher than Ontario's. Moreover, in spite of equalization payments and the fact that the differentials in per capita GDP appear to be narrowing slowly, not all provinces are able to afford a similar menu of services. Yet there is a great deal of pressure on provincial governments to offer their citizens services similar to those available in other provinces. Thus, a service introduced by Ontario may be demanded by citizens in Manitoba, regardless of whether or not the less-fortunate province can afford it. The equalization program in its present design does not cover many differences in ability to pay for services. Continuing the example, if Ontario raises its RST to pay for the new service, the equalization formula would lead to an increase in the transfer to Manitoba but it may be inadequate to bridge the gap between a similar rise in that province's taxes and the cost of the similar service there.[43]

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[41] For a discussion of fiscal equity, see Boadway, *Intergovernmental Transfers in Canada*, pp. 46–49. Fiscal equity could be achieved by income support, which governments could then tax, or by unconditional transfers to governments. The present situation combines some income support with equalization payments to the "have-not" provinces.

[42] François Vaillancourt, "L'aide sociale au Canada et au Québec 1970–1985: évolution et analyse," in *Le redressement des finances publiques québécoises: quelques pistes d'analyse* (Montréal: Institut C.D. Howe, 1986), p. 120.

In brief, there are serious shortcomings in the effort to achieve horizontal equity through fiscal arrangements. As already noted, the UI program has been taking up some of the slack through its differential for areas of high unemployment. UI reform thus makes a reassessment of equalization and the CAP a pressing issue for provinces whose residents have been benefiting from that differential. In addition to reallocating the responsibility for general welfare assistance, policymakers might redesign equalization to take into account provincial differences in employment structure. Policymakers also might design stabilization to be more regionally sensitive and to operate in conjunction with a redesigned equalization program. Finally, they should also examine the current implicit assumption that per capita needs are the same across Canada and that the total mix of services will somehow cost the same from province to province.

Summary

Many of the current fiscal arrangements between the federal and provincial governments date from the 1960s, when Ottawa was flush with cash and could buy the provinces off. Its growing financial predicament has made it more parsimonious, bringing into the open stresses and strains that had been growing for some time. The current constitutional debate has now provided an incentive to resolve these difficulties.

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[43] See Courchene, *Equalization Payments*, chapter 12 and technical appendix.

Although the mid- and late 1980s were generally good for the economy, they were overshadowed by regional disparities in economic performance and the existence of seemingly intractable deficits at the federal level and in a number of provinces. The combination of high interest rates and the stronger Canadian dollar's effect on commodity export earnings has left resource-dependent provinces frustrated by macro policies over which they have no control. Expenditure restraint in Ontario could have assisted the Bank of Canada in its fight against inflation.

Meanwhile, and most unfortunately, Ottawa has chosen to make guerrilla warfare on program spending growth rather than using a grand strategy for setting priorities and goals and redefining appropriate financial responsibility (federal, provincial, and private). For example, then-finance minister Michael Wilson, outlining the Conservative government's first-term goals, suggested in 1984 that health and postsecondary education were areas where both levels of government might economize: "Neither level of government has the economic capacity to invest large amounts of new money in these areas. It is time...to look for new approaches within the limits of budget realities."[44] Yet, what the federal government did was to make a series of unilateral cutbacks in EPF and other transfers. However justified limiting that spending growth may have been, this action did nothing to fulfill Mr. Wilson's "commitment to rebuild co-operative federalism," since, in the eyes of some provinces, it violated the existing fiscal arrangements.[45] Furthermore, although it may have helped the federal government to reduce its own deficit, the way it was imposed muted the final effect on the aggregate public-sector deficit because the provinces had to deal with an unexpected shortfall in the growth of EFP transfers. Some did not feel able to make offsetting increases in their own-source revenue, so their deficits increased. Later, Ottawa's delay in its initiative on day care left in the lurch those provinces that had begun to act on it.

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[44] Canada, Department of Finance, *A New Direction for Canada; An Agenda for Economic Renewal* (Ottawa, 1984), p. 82.

[45] Ontario voiced its objections and then its annoyance in 1985 and 1986. Quebec made clear its objections to the lack of consultation and the transfer of the deficit from one level of government to the other. "Therefore, as of April 1, 1986, a year before the normal expiry date of the current fiscal arrangements, the federal government decided that its contribution to the EPF would no longer increase at the same rate as the growth of the economy" (Quebec, Budget, 1986/87, p. F-3; see also Manitoba, Budget, 1986/87 p. E-5).

Other initiatives that have caused difficulties in relations between Ottawa and the provinces are the Canada-U.S. Free Trade Agreement and the GST, not to mention the constitutional crisis that developed in 1990. Perhaps most significant, there is a fear of the costs of dealing with the federal debt. "Have-not" provinces dread the further diminishing of federal support, and "have" provinces resent the fact that extra revenue will inevitably have to come from their residents. Although the provinces generally recognize that there has to be some give on their part, the unilateral way the federal government has come to solutions has not furthered the cause of federal-provincial cooperation.

If the equalization or cost-sharing programs are to be restructured, the provinces have a right to expect to play a role in the design. Moreover, as pressure shifts back and forth between federal and provincial responsibilities, revenue shares should adjusted. To achieve this, national ceilings on tax rates could be agreed on and the shares negotiated periodically. Without this flexibility, each level of government is tempted to fill the vacated expenditure room with a new or enhanced program in order to justify hanging on to the current revenue share.

What is important is that these matters be discussed openly and that negotiations and disagreements over the sharing of funding, taxing, and spending responsibilities not obscure the need to foster a more flexible and competitive economy for the country as a whole. It is unfortunate that the country has had to be plunged into a constitutional crisis before finding the will to reform fiscal federalism. Most of the fiscal arrangements can be changed within the present Consitution, and it would be unfortunate if the political timetable were to dictate the fiscal agenda, causing the federal and provincial governments to agree to a poorly thought-out reallocation of responsibilities and powers.

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Irene K. Ip

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Irene K. Ip is a Senior Policy Analyst at the C.D. Howe Institute and Advisor to the C.D. Howe Institute Policy Analysis Committee. Before joining the Institute, she was a Vice President and Chief Forecaster at investment dealer Wood Gundy Inc. Ms. Ip has written extensively on all levels of public finance in Canada, including *Strong Medicine: Budgeting for Recession and Recovery* (1991); "An Overview of Provincial Government Finances," in Melville McMillan, ed., *Provincial Public Finances* (1991); and "Fiscal Policy," in Thomas J. Kierans, ed., *Getting It Right* (1990, with William B.P. Robson).

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